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Dear Mr. F. David Butler,

As you are aware, smart meters are electric meters that remotely gather electronic usage. They send this information back to the utility company in the form of pulsed electromagnetic frequencies (EMFs) ranging from 800 to 2400 MHZ. Unfortunately, the long term health effects the non-ionized pulsed EMFs that smart meters emit have not been studied. The FCCs guidelines for the maximum permitted exposure of EMFs were written in 1986. These old, out of date recommendations no longer assure human safety. These recommendations are based on acute thermal exposure only. The amount of radiation people have been exposed to have increased dramatically since the 1990's largely due to cell phones, and wifi and more recently smart meters. The FCCs guidelines do not take into account the cumulative nature of radiation and the adverse effects it has on the human body and animals.

Smart meters emit 1,000,000 times the amount of electromagnetic frequencies believed by experts to be safe for human exposure. For further details on this please see the Bioinitiative 2012 Report: A Rationale for Biologically-based Exposure Standards for Low-Intensity Electromagnetic Radiation. This report includes evidence for effects on gene and protein expression, DNA, immune function, neurology, behavior, Alzheimer's, and several forms of cancer including acoustic neuromas, leukemia, breast cancer, and brain tumors from EMFs. Here is the link to the Bioinitiative report.

<http://www.bioinitiative.org/report/wp-content/uploads/pdfs/BioInitiativeReport2012.pdf>

I have included the Wireless Utility Meter Safety Impacts Survey done in 2011 by Ed Halteman. This survey was done in California after smart meters were installed. I have also included excerpts from Smart Meter Health Effects Survey: Results, Analysis and Report by Richard Conrad PhD and Ed Friedman. From this you can see a list of symptoms and some comments people have written about their experience with smart meters. These surveys show the adverse effects that people notice soon after smart meters are placed on their home. While some people may notice adverse health effects almost immediately the latency for disease onset from EMFs may be years. Studies and reports show that children are at increased risk for adverse health problems both physical and mental due to EMFs.

The symptoms people have reported due to smart meters include but are not limited to the following: insomnia, difficulty falling asleep, nightmares, stress, agitation, anxiety, irritability, changes in children's behavior, onset of learning disabilities in children, difficulty concentrating, memory problems, difficulty learning, ADD, headaches, flu like symptoms, nausea, digestive problems, sharp pain or pressure in the head, tinnitus, or ear buzzing, ear pain, feeling tired, lethargy, extreme fatigue debilitating for some, weakness, balance problems, dizziness, eye pain and vision problems, rashes, tingling, burning or itching skin, cardiac problems, heart palpitation, heart arrhythmias, chest pain, hypertension, low blood pressure, respiratory problems, asthma, cough, nose bleeds, involuntary muscle contractions, muscle weakness, leg cramps, neuropathy, seizures, arthritis, pain, urinary problems, thyroid problems,

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diabetes, changes in menstrual cycle, recurrence of cancer. The symptom list is long, but if you understand that these forms of EMFs can damage cellular membranes and DNA and every cell in the human body has a cellular membrane and DNA you understand why no body system seems to be spared.

I have included a copy of Smart Meters: Correcting the Gross Misinformation by La Masion du 21 e Siecle. This article was composed by a group of scientists and experts in response to an article written in Montreal Daily Le Devoir on May 24th 2012. The end of the article includes the extensive lists of all of the scientists and experts who coauthored the article and agree on the dangers of EMFs including smart meters.

Not only are smart meters a risk to people's health. They are also a fire risk. Visit the following links to learn more about the fire hazards smart meters impose.

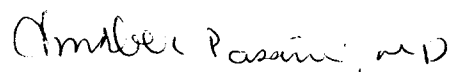
<http://emfsafetynetwork.org/smart-meters/smart-meter-fires-and-explosions/>

<http://www.stopsmartmetersbc.ca/html/?p=4988>

People need to be aware that the study results on EMFs are dramatically different depending on who does the study. Dr. Henry Lai at the University of Washington found that **70% of non -industry studies** (studies done by people who have no vested interest in the outcomes) show an adverse effect. While **only 32% of studies done by industries** show adverse effects.

I understand that from a utility company's perspective it is cheaper and easier to use smart meters instead of paying for someone to read the meter. Many utility companies and even some regulatory bodies don't allow people to opt out of having these extremely dangerous meters on their homes and offices. Utility company decision makers need to ask if the money they are saving is worth all of the adverse effects that are at times being forcefully imposed on their customers. Are they operating from a place of integrity? Utility companies and state regulatory boards' decision makers need to be fully aware of the potential adverse health effects from smart meters and take full responsibility for the dangers they are imposing on Americans! In addition people need to have the right to opt out of having these meters placed on these homes and businesses!

Sincerely,

A handwritten signature in black ink that reads "Amber Passini, MD". The signature is written in a cursive, flowing style.

Amber Passini, MD

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- V. Link for BioInitiative 2012: A Rationale for Biologically-based Exposure Standards for Low-Intensity Electromagnetic Radiation
- VI. Links for information on Smart Meters and Fires

<http://emfsafetynetwork.org/smart-meters/smart-meter-fires-and-explosions/>

<http://www.stopsmartmetersbc.ca/html/?p=4988>

- VII. Excerpts from Smart Meter Health Effects Survey: Results, Analysis and Report by Richard Conrad PhD and Ed Friedman



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Wireless Smart Meter Case Studies

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Founded in 1965 as a non-profit medical association, the American Academy of Environmental Medicine (AAEM) is an international organization of physician and scientists interested in the complex relationship between the environment and health.

AAEM physicians and physicians world-wide are treating patients who report adverse, debilitating health effects following the installation of smart meters, which emit electromagnetic frequencies (EMF) and radiofrequencies (RF).

The peer reviewed, scientific literature demonstrates the correlation between EMF/RF exposure and neurological, cardiac, and pulmonary disease as well as reproductive disorders, immune dysfunction, cancer and other health conditions. The evidence is irrefutable. Despite this research, claims have been made that studies correlating smart meter emissions with adverse health effects do not exist.

The AAEM has received a case series submitted by Dr. Federica Lamech, MBBS, *Self-Reporting of Symptom Development from Exposure to Wireless Smart Meters' Radiofrequency Fields in Victoria*. AAEM supports this research. It is a well documented 92 case series that is scientifically valid. It clearly demonstrates adverse health effects in the human population from smart meter emissions.

The symptoms reported in this case series closely correlate not only with the clinical findings of environmental physicians, but also with the scientific literature. Many of the symptoms reported including fatigue, headaches, heart palpitations, dizziness and other symptoms have been shown to be triggered by electromagnetic field exposure under double blind, placebo controlled conditions. Symptoms in this case series also correlate with the Austrian Medical Association's Guidelines for the Diagnosis and Treatment of EMF Related Health Problems.

It is critically important to note that the data in this case series indicates that the "vast majority of cases" were not electromagnetically hypersensitive until *after* installation of smart meters. Dr. Lamech concludes that smart meters "may have unique characteristics that lower people's threshold for symptom development".

This research is the first of its kind, clearly demonstrating the correlation between smart meters and adverse health effects.

Based on the findings of this case series, AAEM calls for:

- Further research regarding smart meter health effects
- Accommodation for health considerations regarding smart meters.
- Avoidance of smart meter EMF/RF emissions based on health considerations, including the option to maintain analog meters.
- A moratorium on smart meters and implementation of safer technology
- Physicians and health care providers to consider the role of EMF and RF in the disease process, diagnosis and treatment of patients.

Passed by the Board of Directors of the American Academy of Environmental Medicine October 23, 2013

Please note: Smart Meter case series research to be released upon publication

Smart Meters: Correcting the Gross Misinformation

[agfauteux](#) | 11 juin 2012 | [13 Commentaires](#)
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Quebec-based magazine La Maison du 21e siecle asked physician David O. Carpenter, former founding dean of the University at Albany (NY)'s School of Public Health, to comment an open letter published in the Montreal daily Le Devoir on May 24 2012. This letter claimed wireless smart meters pose no risk to public health. More than fifty international experts contributed to the following rebuttal.



Dr David O. Carpenter, founder, University at Albany (NY) School of Public Health

We, the undersigned are a group of scientists and health professionals who together have coauthored hundreds of peer-reviewed studies on the health effects of electromagnetic fields (EMFs). We wish to correct some of the gross misinformation found in the letter regarding wireless "smart" meters that was published in the Montreal daily *Le Devoir* on May 24. Submitted by a group Quebec engineers, physicists and chemists, the letter in question reflects an obvious lack of understanding of the science behind the health impacts of the radiofrequency (RF)/microwave EMFs emitted by these meters.

The statement that « Thousands of studies, both epidemiological and experimental in humans, show no increase in cancer cases as a result of exposure to radio waves of low intensity... » is false (1). In fact, only a few such studies — two dozen case-control studies of mobile phone use, certainly not thousands, have reported no elevations of cancer, and most were funded by the wireless industry. In addition, these reassuring studies contained significant experimental design

flaws, mainly the fact that the populations followed were too small and were followed for a too short period of time.

Non industry-funded studies have clearly demonstrated a significant increase in cancer cases among individuals who have suffered from prolonged exposure to low-level microwaves, transmitted notably by radio antennas. The effects were best documented in meta-analyses that have been published and that include grouped results from several different studies: these analyses consistently showed an increased risk of brain cancer among regular users of a cell phone who have been exposed to microwaves for at least ten years. Children and youths are especially vulnerable (2). For example, the 2009 Hardell-Carlberg study reported a consistent association between use of mobile or cordless phones and two types of head tumors, astrocytoma grade I-IV and acoustic neuroma. The authors »found an especially high risk for persons that started use of mobile or cordless phones before the age of 20 years, although based on low numbers ».

Brain Cancer Rates

Furthermore, the argument that brain cancer rates do not indicate an overall increase in incidence is not evidence that cell phones are safe: the latency for brain cancer in adults after environmental exposure can be long, up to 20-30 years. Most North Americans haven't used cell phones extensively for that long. The evidence of the link between long-term cell phone use and brain cancer comes primarily from Northern Europe, where cell phones have been commonly used since the 1990s. Nevertheless, the most recent collection of primary brain tumors mined from pathology units in Australia showed brain cancer incidence rose by about 35% between 2000 and 2008 in the Australian Capital Territory and New South Wales (total population : more than 7 million).

In May 2011, after reviewing the published scientific literature regarding cancers affecting cell phone users, the International Agency for Research on Cancer (IARC) classified radiofrequency radiation as a 2B, possible human carcinogen. Despite the absence of scientific consensus, the evidence is sufficiently compelling for any cautious parent to want to reduce their loved one's exposure to RF/microwave emissions as much as possible, as recommended by various countries such as Austria, Belgium, Germany, Russia and the United Kingdom.

Electrosensitivity

Public fears about wireless smart meters are well-founded. They are backed by various medical authorities such as those of the Santa Cruz County(California) Public Health Department. These authorities are worried about the growing number of citizens who say they have developed electrohypersensitivity (EHS), especially since for many of them, the symptoms developed after the installation of such meters (it takes some time for most people to link the two events).

Since the turn of the millennium, people are increasingly affected by ambient microwaves due to the growing popularity of wireless devices such as cell phones and Wi-Fi Internet. Therefore, the mass deployment of smart grids could expose large chunks of the general population to alarming risk scenarios without their consent. According to seven surveys done in six European countries between 2002 and 2004, about 10% of Europeans have become electrosensitive. The most

famous person to publicly reveal her electrosensitivity is Gro Harlem Brundtland, formerly Prime Minister of Norway and retired Director of the World Health Organization (WHO).

While there is no consensus on the origins and mechanisms of EHS, many physicians and other specialists around the world have become aware that EHS symptoms (neurological dermatological, acoustical, etc.) seem to be triggered by exposure to EMF levels well below current international exposure limits, which are established solely on short-term thermal effects (3). Organizations such as the Austrian Medical Association and the American Academy of Environmental Medicine have recognized that the ideal way to treat of EHS is to reduce EMF exposure.

Therefore, caution is warranted because the growing variety of RF/microwave emissions produced by many wireless devices such as smart meters have never been tested for their potential biological effects.

Well-known bioeffects

While the specific pathways to cancer are not fully understood, it is scientifically unacceptable to deny the weight of the evidence regarding the increase in cancer cases in humans that are exposed to high levels of RF/microwave radiation.

The statement that « there is no established mechanism by which a radio wave could induce an adverse effect on human tissue other than by heating » is incorrect, and reflects a lack of awareness and understanding of the scientific literature on the subject. In fact, more than a thousand studies done on low intensity, high frequency, non-ionizing radiation, going back at least fifty years, show that some biological mechanisms of effect do not involve heat. This radiation sends signals to living tissue that stimulate biochemical changes, which can generate various symptoms and may lead to diseases such as cancer.

Even though RF/microwaves don't have the energy to directly break chemical bonds, unlike ionizing radiation such as X-rays, there is scientific evidence that this energy can cause DNA damage indirectly leading to cancer by a combination of biological effects. Recent publications have documented the generation of free radicals, increased permeability of the blood brain barrier allowing potentially toxic chemicals to enter the brain, induction of genes, as well as altered electrical and metabolic activity in human brains upon application of cell phone RF/microwaves similar to those produced by smart meters.

These effects are cumulative and depend on many factors including RF/microwave levels, frequency, waveform, exposure time, biovariability between individuals and combination with other toxic agents. Clear evidence that these microwaves are indeed bioactive has been shown by the fact that low-intensity EMFs have proven clinically useful in some circumstances. Pulsed EMFs have long been used to successfully treat bone fractures that are resistant to other forms of therapy. More recently, frequency-specific, amplitude-modulated EMFs have been found useful to treat advanced carcinoma and chronic pain.

High frequency EMFs such as the microwaves used in cell phones, smart meters, Wi-Fi and cordless “DECT” phones, appear to be the most damaging when used commonly. Most of their

biological effects, including symptoms of electrohypersensitivity, can be seen in the damage done to cellular membranes by the loss of structurally-important calcium ions. Prolonged exposure to these high frequencies may eventually lead to cellular malfunction and death.

Furthermore, malfunction of the parathyroid gland, located in the neck just inches from where one holds a cell phone, may actually cause electrohypersensitivity in some people by reducing the background level of calcium ions in the blood. RF/microwave radiation is also known to decrease the production of melatonin, which protects against cancer, and to promote the growth of existing cancer cells.

Early warning scientists attacked

In recommending that the Precautionary Principle be applied in EMF matters, the European Environment Agency's Director Jacqueline McGlade wrote in 2009: "We have noted from previous health hazard histories such as that of lead in petrol, and methyl mercury, that 'early warning' scientists frequently suffer from discrimination, from loss of research funds, and from unduly personal attacks on their scientific integrity. It would be surprising if this is not already a feature of the present EMF controversy... » Such unfortunate consequences have indeed occurred.

The statement in the *Le Devoir* letter that « if we consider that a debate should take place, it should focus exclusively on the effects of cell phones on health » is basically an acknowledgement that there is at least some reason to be concerned about cell phones. However, while the immediate exposure from a cell phone is of much greater intensity than the exposure from smart meters, cell phone use is temporary.

Smart meters

As Australian Associate Professor of neurosurgery Vini G. Khurana reports, adverse neurological effects have been reported in people who sustain close proximity to wireless meters, especially under 10 feet (3 metres).

A wireless smart meter produces radiofrequency microwave radiation with two antennas in approximately the same frequency range (900 MHz to 2.4 GHz) as a typical cell tower. But, depending on how close it is to occupied space within a home, a smart meter can cause much higher RF exposures than cell towers commonly do. If a smart meter is located on a common wall with a bedroom or kitchen rather than a garage wall, for example, the RF exposure can be the same as being within 200 to 600 feet distance of a cell tower with multiple carriers. With both cell towers and smart meters, the entire body is immersed by microwaves that go out in all directions, which increases the risk of overexposure to many sensitive organs such as the eyes and testicles. With a cell phone, people are exposed to microwaves primarily in the head and neck (unless using speaker mode), and only when the device is turned on or in standby mode.

Wireless smart meters typically produce atypical, relatively potent and very short pulsed RF/microwaves whose biological effects have never been fully tested. They emit these millisecond-long RF bursts on average 9,600 times a day with a maximum of 190,000 daily transmissions and a peak level emission two and a half times higher than the stated safety signal, as the California utility Pacific Gas & Electric recognized before that State's Public Utilities

Commission. Thus people in proximity to a smart meter are at risk of significantly greater aggregate of RF/microwave exposure than with a cell phone, not to mention the cumulative exposure received by people living near multiple meters mounted together, pole-mounted routers or utility collector meters using a third antenna to relay RF signals from 500 to 5,000 homes.

A technical study performed by Sage Associates in California indicates that RF levels from various scenarios depicting normal smart meter installation and operation may violate even the out-of-date US public safety standards which only consider acute thermal effects. This can happen when a person stands close to the meter to read the power consumption, or touches it, or shades the meter face with a hand to better read it. Emissions are also increased by reflective materials, such as stainless steel, other metals and mirrors, which can re-radiate stronger than the otherwise unaltered background. Microwaves are absorbed and dissipated by partially conductive materials, such as cement and special RF shielding paints and fabrics.

In addition to the erratic bursts of modulated microwaves emitted by wireless smart meters transferring usage data to electric, gas and water utilities, wireless as well as wired smart (powerline communication) meters are also a major source of "dirty electricity" (electrical interference of high frequency voltage transients typically of kilohertz frequencies). Some scientists, such as American epidemiologist Sam Milham, believe that many of the health complaints about smart meters may also be caused by dirty electricity generated by the « switching » power supply activating all smart meters. Since the installation of filters to reduce dirty electricity circulating on house wiring has been found to relieve symptoms of EHS in some people, this method should be considered among the priorities aimed at reducing potential adverse impacts. Indeed, the Salzburg State (Austria) Public Health Department confirms its concern about the potential public health risk when in coming years almost every electric wire and device will emit such transient electric fields in the kilohertz-range due to wired smart meters.

Rather be safe than sorry

The apparent adverse health effects noted with smart meter exposure are likely to be further exacerbated if smart appliances that use wireless communications become the norm and further increase unwarranted exposure.

To date, there have been few independent studies of the health effects of such sources of more continuous but lower intensity microwaves. However, we know after decades of studies of hazardous chemical substances, that chronic exposure to low concentrations of microwaves can cause equal or even greater harm than an acute exposure to high concentrations of the same microwaves.

This is why so many scientists and medical experts urgently recommend that measures following the Precautionary Principle be applied immediately — such as using wired meters — to reduce biologically inappropriate microwave exposure. We are not advocating the abolishment of RF technologies, only the use of common sense and the development and implementation of best practices in using these technologies in order to reduce exposure and risk of health hazards.

(1) • Scientific papers on EMF health effects

(2) On Nov. 19 2012, we struck from this letter an error propagated in the media claiming that « In May 2012, the U.K.'s Office of National Statistics reported a 50 percent increase in incidence of frontal and temporal lobe tumors in children between 1999 and 2009. »

(3) Explanation and studies on electrosensitivity

(4) Governments and organizations that ban or warn against wireless technology

- David O. Carpenter, MD, Director, Institute for Health & the Environment, University at Albany, USA
- Franz Adlkofer, M.D., Chairman of the Pandora Foundation, Coordinator of the European Reflex Report on DNA-damage by cellphone radiation, Neuendorf, Germany
- M. S. H. Al Salameh, PhD, Professor of Electrical Engineering, University of Science & Technology, Irbid, Jordan
- Jennifer Armstrong, MD, Past President, American Society for Environmental Medicine, Founder, Ottawa Environmental Health Clinic, Ontario, Canada
- Pierre L. Auger, MD, Occupational medicine, Multiclinique des accidentés 1464, Montreal, Quebec, Canada
- Igor Beliaev, PhD, Head research scientist, Cancer Research Institute, Slovak Academy of Sciences, Bratislava, Slovak republic
- Fiorella Belpoggi, PhD, Director Cesare Maltoni Cancer Research Center, Ramazzini Institute, Bologna, Italy
- Dominique Belpomme, MD, Director of the European Cancer and Environment Research Institute, Brussels, Belgium
- Martin Blank, PhD, former President, Bioelectromagnetics Society, Special Lecturer, Department of Physiology and Cellular Biophysics, Columbia University Medical Center, New York, USA
- Barry Breger, MD, Centre d'intégration somatosopique (orthomolecular medicine), Montreal, Quebec
- Simona Carrubba, PhD, Prof. Biophysics, Daemen College, Amherst, NY, Associate Researcher, Neurology, Buffalo General Hospital, Buffalo, NY
- John Cline, MD, Professor, Institute for Functional Medicine, Federal Way, WA, USA, Medical Director, Cline Medical Centre, Nanaimo, BC, Canada
- Alvaro Augusto de Salles, PhD, Professor of Electrical Engineering, Federal University of Rio Grande do Sul, Porto Alegre, Brazil
- Christos Georgiou, Prof. Biochemistry, Biology Department, University of Patras, Greece
- Andrew Goldsworthy, PhD, Honorary lecturer in Biology, Imperial College, London, UK
- Claudio Gómez-Perretta, MD, Director, Centro de Investigación, Hospital Universitario LA Fe, Valencia, Spain
- Livio Giuliani, PhD, Senior Researcher, National Insurance Institute (INAIL), Chief of Radiation and Ultrasounds Research Unit, Rome, Italy
- Yury Grigoriev, PhD, Chair Russian National Committee on Non-Ionizing Radiation Protection, Moscow, Russia
- Settimio Grimaldi, PhD, Director, Institute of Translational Pharmacology (Neurobiology and molecular medicine), National Research Council, Rome, Italy
- Magda Havas, PhD, Centre for Health Studies, Trent University, Canada
- Lennart Hardell, MD, Professor of Oncology, University Hospital, Örebro, Sweden

- Denis L. Henshaw, PhD, Professor of Physics, Head of The Human Radiation Effects Group, University of Bristol, UK
- Ronald B. Herberman, MD, Chairman of Board, Environmental Health Trust, and Founding Director emeritus, University of Pittsburgh Cancer Institute, USA
- Donald Hillman, PhD, Dairy Science, Professor Emeritus, Department of Animal Science, Michigan State University, USA
- Isaac Jamieson, PhD, Environmental Science (electromagnetic phenomena in the built environment), independent architect, scientist and environmental consultant, Hertfordshire, UK
- Olle Johansson, PhD, Professor of Neuroscience (Experimental Dermatology Unit), Karolinska Institute, Stockholm, Sweden
- Yury Kromm, PhD, Soviet authority on physics of nonlinear vibrations and high frequency electromagnetic vibrations, founder of Energy Tools International, Oregon, USA
- Vini G. Khurana, MBBS, Associate of Professor of Neurosurgery, Australian National University, Australia
- Henry Lai, PhD, Professor of Bioengineering, University of Washington School of Medicine, Seattle, WA, USA
- Abraham R. Liboff, PhD, Professor Emeritus, Department of Physics, Oakland University, Rochester, Michigan, USA
- Don Maisch, PhD, Researcher on radiation exposure standards for telecommunications frequency, EMFacts Consultancy, Tasmania, Australia
- Erica Mallery-Blythe, MD, Emergency Medicine Physician, England
- Andrew A. Marino, MD, Professor of Neurology, LSU Health Sciences Center, Shreveport, LA, USA
- Karl Maret, MD, President, Dove Health Alliance, Aptos, CA, USA
- Fiorenzo Marinelli, PhD, Researcher on biological effects of EMFs, Institute of Molecular Genetics, National Research Council, Bologna, Italy
- Andrew Michrowski, PhD, Director, Planetary Association for Clean Energy, Ottawa, Canada
- Sam Milham, MD, former chief epidemiologist, Washington State Department of Health, USA
- Joel M. Moskowitz, PhD, Director, Center for Family and Community Health, School of Public Health, University of California, Berkeley
- Gerd Oberfeld, MD, Public Health Department, Salzburg State Government, Austria
- Mike O'Carroll, PhD, Professor Emeritus (Applied Mathematics), University of Sunderland, UK
- Jerry L. Phillips, PhD, Director, Center for Excellence in Science, Department of Chemistry and Biochemistry, University of Colorado, USA
- John Podd, PhD, Professor of Psychology (experimental neuropsychology), Massey University, New-Zeland
- William J. Rea, MD, thoracic and cardiovascular surgeon, founder of the Environmental Health Center, Dallas, Tx, USA
- Elihu D. Richter, MD, Professor, Hebrew University-Hadassah School of Public Health and Community Medicine, Jerusalem, Israel
- Leif G. Salford, MD, Senior Professor of Neurosurgery, Lund University, Sweden
- Nesrin Seyhan, MD, Founder and Chair of Biophysics, Medical Faculty of Gazi University, Turkey
- Cyril W. Smith, PhD, lead author of "Electromagnetic Man", retired from Electronic and Electrical Engineering, University of Salford, UK

- Morando Soffritti, MD, Scientific Director of the European Foundation for Oncology and Environmental Sciences “B. Ramazzini” in Bologna, Italy
- Carlos Sosa, MD, surgeon affected by the Microwave syndrome, Medellin, Columbia
- Antoinette “Toni” Stein, PhD, Collaborative on Health and the Environment (CHE-EMF Working Group), Co-Coordinator, Berkeley, CA, USA
- Stanislaw Szmigielski, MD, PhD Professor of Pathophysiology, Consulting Expert, former director of Microwave Safety, Military Institute of Hygiene and Epidemiology, Warsaw, Poland
- Lauraine Vivian, PhD, Senior Lecturer, Primary Health Care Directorate, Faculty of Health Sciences, University of Cape Town, South Africa.
- Bradford S. Weeks, MD, Director, The Weeks Clinic, Clinton, WA, USA
- Stelios A. Zinelis, MD, Vice-President, Hellenic Cancer Society, Cefallonia, Greece

Coordination: Andre Fauteux, Publisher and Editor in chief, la Maison du 21e siècle magazine, Sainte-Adele, Quebec, Canada.

Articles similaires:

1. Electrosensitivity caused by chronic nervous system arousal – Dr Roy Fox
2. Actualités électrosmog: cellulaire et cancer
3. Electrosmog: twelve ways of avoiding it
4. Compteurs intelligents: les dernières actualités web

Mots-clé: brain cancer, cancer, microwaves, quebec, radiofrequency, smart meters

Catégorie: Actualités, Électrosmog, Hypersensibilités environnementales, Maisons saines

THE BRITISH COLUMBIA RESOLUTION ON THE PROLIFERATION OF ELECTROMAGNETIC RADIATION.

Petition by Ron Gordon

To be delivered to **BC Provincial Health Office**

THE BRITISH COLUMBIA RESOLUTION ON THE PROLIFERATION OF
ELECTROMAGNETIC RADIATION.

THE HAZARD:

Whereas the population of the Province of British Columbia is not currently protected by effective and authoritative guidelines or regulations governing exposure to involuntary or incidental, non-thermal, electromagnetic radiation in their homes and public places, the British Columbia, Canada, organization - Citizens for Safe Technology - in collaboration with the undersigned, hereby passes the following Resolution.

THE RESOLUTION:

1 Guidelines and regulations to protect the population of British Columbia from the

effects of all forms, frequencies and intensities of electromagnetic radiation must be immediately instituted.

2 The guidelines and regulations mentioned in Article 1 must be based on the findings of independent, non industry-affiliated studies which include, but are not limited to, research into the effects of low-level, non-thermal pulsed radiation; (1)

3 The Provincial Health Officer for British Columbia must publicly acknowledge and immediately invoke the Precautionary Principle (2) with regards to the protection of the population of the Province of British Columbia against the known and/or potential harmful acute and chronic effects of exposure to all forms, frequencies and intensities of electromagnetic radiation; and

4 Direct and immediate action must be taken to halt the proliferation of, and subsequently reduce, the non-consensual exposure of children and pregnant mothers to electromagnetic radiation in all areas of society, most notably through the removal of wireless internet connections in schools, libraries, and other public places.

THE EVIDENCE:

1 The British Columbia Provincial Health Officer has, to date, relied on the guidelines offered by Health Canada in Safety Code 6 to assert that exposure levels within the province are within acceptable levels. However, Health Canada acknowledges (3) that these guidelines are based purely on thermal effects and are intended to apply solely

to federally regulated sites. Consequently, they have questionable application in the protection of the general public since they have no authority or application in the protection of the population of the Province in their homes or public places.

Furthermore, strong scientific evidence shows that the levels of (thermal) radiation that Health Canada deems safe for the adult population do not provide adequate protection for children. (4)

The Health Canada guidelines state in the preamble: 'Safety limits in this code apply to all individuals working at, or visiting, federally regulated sites. These guidelines may also be adopted by the provinces, industry or other interested parties.'

WorkSafe BC, which regulates the welfare of employees, has adopted Health Canada's Safety Code 6 but as previously noted, this is neither intended nor adapted to provide protection to the public, and considers only the thermal effects of electromagnetic radiation.

2 The Radiofrequency Toolkit for Environmental Health Practitioners, published in 2013 by The British Columbia Centre for Disease Control and commissioned by the British Columbia Provincial Medical Officer, acknowledges that there is conclusive evidence of biological damage caused by exposure to EMR. (Section 10 - Mobile Phones, Radiofrequency Waves, and Male Infertility). Consequently, through inaction, the British Columbia Provincial Medical Officer is placing in jeopardy the health of the population of the Province and, in particular, the health and mental development of children who numerous studies and reports identify as being at increased risk caused by exposure to Electromagnetic Radiation. (4) (31) (39) (41) (44) (45) (46) (50) (51) (53) (56) (57) (59) (60) (61) (62)

The Radiofrequency Toolkit for Environmental Health Practitioners states:

- 'A large increase in induced fields for children's bone marrow was attributed to its higher conductivity compared with that of adults.'
- 'For the same emitted power, children and fetuses experience higher SAR.' (5)
- 'Whole body exposure at frequencies in the range of 80 to 180 MHz and 1–4 GHz to ICNIRP reference exposure levels may expose children and small persons (shorter than 1.3 m) to above acceptable ICNIRP SAR levels.' (6)
- 'Children may potentially be at greater risk for adverse health outcomes resulting from exposure to RF.'
- 'Because the brain is particularly vulnerable to environmental insults during fetal development, childhood and adolescence, there is a need for further studies to ascertain whether there are effects during their developmental stages.'
- 'Unlike the mixed findings found in occupational health studies of radar EMF exposures, the epidemiological studies of men assessed for infertility were consistent in demonstrating decreased sperm motility associated with increased use of mobile phones.'
- 'Apart from the known thermal effects of RF, oxidative stress due to increased Reactive Oxygen Species (ROS) or decreased antioxidants is a plausible explanation for non-thermal effects of RF on sperm cells.'

It is therefore incumbent upon the Provincial Health Officer to heed the findings of the Radiofrequency Toolkit and immediately invoke the Precautionary Principle.

3 This Resolution also is based on an accumulation of international research demonstrating beyond doubt genotoxicity from electromagnetic radiation, and is

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supported by various international resolutions (7) calling for a cessation or reduction of the levels of exposure to such radiation in society. These documents offer unequivocal evidence of biological damage to persons caused by exposure to electromagnetic radiation at levels significantly below those deemed safe by the British Columbia Provincial Health Officer. A partial list of references, representative of many others whose inclusion is limited only by space, can be found in the Appendix to this Resolution.

It is therefore strongly recommended that, based on the findings of The Radiofrequency Toolkit for Environmental Health Practitioners and the numerous references in the Appendix to this document, the province must formulate clear and comprehensive guidelines and regulations that provide adequate protection for the public at large.

APPENDIX:

1 The FCC's current exposure guidelines, as well as those of the Institute of Electrical and Electronics Engineers and the International Commission on Non-ionizing Radiation Protection, are thermally based, and do not apply to chronic, non-thermal exposure situations. They are believed to protect against injury that may be caused by acute exposures that result in tissue heating or electric shock and burn. The hazard level (for frequencies generally at or greater than 3 MHz) is based on a specific absorption dose-rate, SAR, associated with an effect that results from an increase in body temperature. The FCC's exposure guideline is considered protective of effects arising from a thermal mechanism but not from all possible mechanisms. Therefore,

the generalization by many that the guidelines protect human beings from harm by any or all mechanisms is not justified.

2 Precautionary Principle: The precautionary principle or precautionary approach states if an action or policy has a suspected risk of causing harm to the public or to the environment, in the absence of scientific consensus that the action or policy is harmful, the burden of proof that it is not harmful falls on those taking an act.
(Wikipedia)

3 Health Canada scientist, James McNamce, admitted in Quebec Superior Court in Feb. 2013 that for frequencies between 100 kHz and 300 GHz Safety Code 6 is based only on heating. (<http://www.magdahavas.com/health-canada-admits-safety-code-6-guideline-for-microwave-radiation-is-based-only-on-thermal-effects/>)

4 Dr. Glaser (Ph.D.), the former head of the U.S. Navy Microwave Laboratory and subsequently with the US Food and Drug Administration, when asked whether Health Canada's assurances that microwave radiation from Wi-Fi is 'safe' for children said: 'They're either giving you partial information, or they're giving you misinformation. Because there is scientific consensus that microwaves cause biological effects. There is scientific consensus that children are more vulnerable. And there is no evidence whatsoever that it is safe for children. That is no foundation on which to declare something is safe.'

5 SAR: Specific Absorption Rate.



6 ICNIRP: The International Commission on Non-Ionizing Radiation Protection.

7 EMF resolutions signed by concerned scientists and medical doctors

The following list of Resolutions are signed by scientists, engineers and medical doctors who have been doing EMF research and working internationally on electromagnetic fields health and safety. The combination of their training, experience and the many contributions they have made in conducting and publishing, represents hundreds of years of expertise and places them at the forefront of knowledge about EMF:

Vienna Resolution 1998

(www.icems.eu/docs/resolutions/Vienna_Resolution_1998.pdf)

Salzburg Austria Resolution 2000

(http://www.salzburg.gv.at/salzburg_resolution_e.htm)

Freiburger Appeal 2002 (www.laleva.cc/environment/freiburger_appeal.html)

Catania Italy 2002 (www.emrpolicy.org/faq/catania.pdf)

Benevento Italy Resolution 2006 (http://www.icems.eu/benevento_resolution.htm)

Venice Italy Resolution 2008 (<http://www.icems.eu/resolution.htm>)

Porto Alegre Resolution 2009 (http://www.icems.eu/other_res.htm)

8 Many countries - New Zealand, Italy, China, Bulgaria, Hungary, Russia, Switzerland, Austria and New South Wales, Australia - have lower limits that factor in the non-thermal cumulative effects, which have been shown to occur at levels thousands of times lower than the thermal effects. (<http://emfsafetynetwork.org/wp->

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content/uploads/2011/12/CelltowerRptdoc.pdf)

9 Doctors/Scientists Call for Moratorium or Stricter Guidelines on All WiFi Devices:

Brussels Appeal 2007

Berlin Appeal 2008

Venice Resolution 2008

London Resolution 2009

Paris Appeal 2009

Porto Alegre Resolution 2009

Dutch Appeal 2009

EMF Resolution 2009

Seletun Consensus Statement 2010

Copenhagen Resolution 2010

Int'l Appeal of Würzburg 2010

European Parliament

(http://www.cellphonetaskforce.org/?page_id=128)

10 1967. 'Pulsed microwave more dangerous than continuous wave'. So says Herbert Pollack, M.D., on behalf of the Institute for Defense Analysis Research and Engineering Support Div. (http://www.magdahavas.com/wordpress/wp-content/uploads/2010/07/Pollack_19671.pdf)

11 1971. US Naval Medical Research researched 2300 studies listing all illnesses

resulting from thermal and non thermal effects of Radio / Microwave Frequency EMR. They paid particular attention to the effects on man of non-ionizing radiation. Zorach R. Glaser, Ph.D. LT, MSC, USNR Research
(http://www.magdahavas.com/wordpress/wp-content/uploads/2010/06/Navy_Radiowave_Brief.pdf)

12 1971. The U.S. President's own Management Advisory Council warned: 'power levels in and around American cities, airports and homes may already be biologically significant.' The population at risk 'may well be the entire population.' The consequences of undervaluing or misjudging the biological effects of long-term, low-level exposure could become a critical problem for the public health, especially if genetic effects are involved.

13 1975. The U.S. Defense Intelligence Agency (DIA) warned its own personnel of the risks from low level EMR including: microwave sickness (flu-like symptoms, depression, suicidal tendencies) to cancers and leukemia
(www.wirelesswatchblog.org/wp-content/uploads/2001/11/20)

14 1977. Microwaves: Their Deadly Risk and the Cover-up. 'Microwave radiation can blind you, alter your behaviour, cause genetic damage, even kill you. The risks have been hidden from you by the Pentagon, the State Department, and the electronics industry.' The Zapping of America. Paul Brodeur (1977)

15 1979. NIOSH (National Institute for Occupational Safety and Health) and OSHA

(Occupational Safety, Health Agency) believe there is sufficient evidence of harmful non-thermal effects to humans, they recommend that precautionary measures be instituted to minimize the risk to workers from unwarranted exposure to RF energy (www.cdc.gov/niosh/docs/80-107/)

16 1986. Eldon Byrd, a scientist for the Naval Surface Weapons Centre, USN, said about M/W radiation: ‘We can alter the behaviour of tissues, cells, organs and whole organisms.... you can cause up to six times higher foetus mortality and birth defects in laboratory animals, and these fields are so weak you can hardly detect them...’

17 1989. Pulsed EMFs cause cancer in a study of electric utility workers in Quebec (follow-up, 1970–1988) and France (follow-up, 1978–1989): 2,679 cases of cancer were identified. (Hydro Quebec was furious that the results were published and stopped further research.) (<http://aje.oxfordjournals.org/content/140/9/805.abstract>)

18 1990. The U.S. Environmental Protection Agency’s (EPA)’s Draft report recommended EMR be classified 2B “Possible” carcinogen. 33 of 35 international research studies conclusively linked EMR to brain tumors, leukemia & other forms of cancer, etc., but Pres. H.W. Bush’s White House quashed recommendation due to pressure from US Military, Telecom/wireless Industries. Electromagnetic Radiation. Chloe Wadsworth.

19 1990. The U.S. Environmental Protection Agency (EPA) says power line EMF is a “probable carcinogen.” A leaked EPA document concluded that power line EMF

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should be classified a "probable (2A) human carcinogen." William Farland, then-director of the EPA's Office of Health and Environmental Assessment ordered this conclusion deleted from the report.

(<http://bizgenerationnetwork.blogspot.ca/2012/07/lynas-cancer-and-you.html>)

20 1993. The U.S. Food and Drug Administration (FDA) Data "Strongly Suggest" Microwaves can promote cancer. FDA biologists concluded that the available data "strongly suggest" that Microwaves can "accelerate the development of cancer."

(<http://microwavenews.com/news/backissues/j-f03issue.pdf>)

21 1993. Dr. George Carlo PhD, JD, conducted the Telecom Industry's own six-year (1993-1999), USD \$28.5-million study intended to prove that cell phones are safe. The study proved precisely the opposite. Dr. George Carlo was Head of Project. His report concluded: 1) Federal microwave exposure standards are dangerously high, and 2) Cell damage and tumors can be easily induced in the lab at about one-third of the FCC's exposure guidelines. (<http://www.leaf lady.org/ElectroSmog.htm>)

(http://www.lef.org/magazine/mag2007/aug2007_report_cellphone_radiation_01.htm)

22 1998. NIEHS (National Institute of Environmental Health Sciences) Classified ELF EMFs a 2B "Possible" Carcinogen. (Electrical sub-stations, power lines, house wiring electrical appliances) (<http://lifeenergies.com/he-emr>)

23 1999. U.S. Consumer Affairs Commission said: 'Current thermal guidelines associated with EMR are irrelevant. Cancer and Alzheimer's are associated with non-

thermal EMR effects.' (<http://lifeenergies.com/he-emr/>)

24 2001. The WHO's own IARC (International Agency for Research on Cancer) said ELF EMFs are "Possible Carcinogens." Twenty-one scientists from 10 countries unanimously find ELF EMFs are a Class 2B "Possible" carcinogen (Electrical substations, power lines, house wiring, electrical appliances)

Microwave News July/August 2001 <http://www.emfwise.com/powerline.php> and www.microwavenews.com

25 2002. FCC (Federal Communication Commission — none of whom are scientists) set microwave radiation levels more than 10,000 times HIGHER than levels which, according to the EPA, were causing illnesses all over the world!

<http://lifeenergies.com/he-emr/>

26 2002. Freiburger Appeal. Signed by more than 6,000 German doctors, lists 13 severe chronic illnesses & various disorders involving: behaviour, blood, heart, cancers, tinnitus, migraines, susceptibility to infections and sleeplessness, all of which they ascribed to pulsed M/W from mobile communications devices.

<http://omega.twoday.net/stories/555926/>

27 2002. US EPA acknowledges FCC guidelines for radiation exposure are outdated, stating in a letter: "The FCC's current exposure guidelines, as well as those of the Institute of Electrical and Electronics Engineers (IEEE) and the International Commission on Non-ionizing Radiation Protection, are thermally based, and do not

apply to chronic, non-thermal exposure situations.

<http://www.nemc.gov.au/Media/docs/Market-Review-Submission-EPR0022---Helen-Weir---121009---Supporting-document-3-85f00cf2-edec-4fb3-9ce4-d3166da1e356-0.PDF>

28 2003. Toronto's Public Health Officer recommended Health Canada's Safety levels for microwave exposure be lowered by a factor of 100 times.

http://www.opha.on.ca/What%20We%20Do/Position%20Papers/papers/2003-02_pp.pdf

29 2003. The Ontario Public Health Association (OPHA) urges Health Canada to introduce strict governmental research, quality control and testing of cell phones available in Canada. The recommendation by Toronto Public Health to reduce the SC6 exposure limits by a factor of 100 has merit and deserves serious consideration by Health Canada.

http://www.opha.on.ca/What%20We%20Do/Position%20Papers/papers/2003-02_pp.pdf

30 2003. Swisscom, the leading telecom provider in Switzerland, reveals the true danger of WiFi in a patent application. It devised a way to reduce the microwave radiation from Wi-Fi LANs. In its patent application, Swisscom clearly states the elevated risk of cancer and genetic damage from the constant low level microwave/RF exposure from WiFi. http://www.safeschool.ca/Swisscom__WiFi_Harms.html

31 2003. UK Education Secretary David Blunkett bans cell phones from all schools in England and Wales, saying mobile phones should only be used by pupils under 16 in emergencies.

32 2004. Radio Frequencies are dangerous. There are well over 10,000 scientific reports from many countries around the world, many of them dating back to the 1950's, verifying that high frequency energy shoots straight into the brain, is absorbed by the brain cells, heats them up and damages the DNA.

www.mercola.com U.S Senate Committee Confirms Dangers of Cell Phones,
<http://emf.mercola.com/sites/emf/archive/2010/01/21/US-Senate-Committee-Confirms-Dangers-of-Cell-Phones.aspx>

33 2005. Corruption in the WHO. On July 5, 2005, it was published that Dr. Michael Repacholi – Coordinator of the WHO's 10-year, \$250-million International Project to study the harmful effects of EMR and EMFs- receives \$150,000 a year (via Royal Adelaide Hospital, S.A.) from the cellular phone industry with additional money for meetings and travels. (microwavenews.com 5.7.05)

34 2005. The National Institute for Occupational Safety and Health (NIOSH) recognized Electromagnetic Sensitivity (EHS) – fifty-five (55) years after the Soviet Union!

35 2007. Toronto's Chief Medical Officer of Health recommends Health Canada's Safety levels for microwave exposure be lowered by a factor of 100X (that's the 3rd



recommendation over four years!) http://safeschool.ca/Health_Warnings.html)

36 2007. BioInitiative Report. Twenty doctors, 10 countries, 2,000 studies. Urged all countries to reduce their Exposure Limits. To comply Safety Code 6 would need to be reduced 10,000 times.

37 2007. The European Environment Agency called on its 27 Member States (500-million people) to: “protect the public more effectively by taking ‘Appropriate, precautionary and proportionate actions ... to avoid ... serious threats’
(www.europarl.europa.eu/sides/getDoc.do?language=EN&reference=A6-0089/2009#title)

38 2007. Israel bans antennas on residences
(http://www.democrats.org.au/docs/2007/Joining_the_Dots11.pdf)

39 2007. Taiwan removes 1500 cell towers near schools
(<http://www.chinapost.com.tw/taiwan/2007/11/06/129715/1500-cellphone.htm>)

40 2008. The European Union Parliament (27 countries, 500-million people) accepts premise of Bio-Initiative 2007 report concerning EMFs and says today’s EMF Exposure Limits are obsolete. (http://safeschool.ca/Health_Warnings.html)

41 2008. European Union countries: In the past 2 years alone Switzerland, France, Germany, Belgium and England have begun removing Wi-Fi from schools and public

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libraries other countries are pressing to do same.

(<http://www.msnbc.msn.com/id/34509513/ns/health-cancer/t/electrosmog-harming-our-health/#.UPnBRR2rnTp>)

42 2008. The Australian Health Research Institute studies indicate that almost one-third of world's population (about two billion) will suffer from ear, eye and brain cancer, and other major body disorders like heart ailments, impotency, migraines, epilepsy.

(http://emrstop.org/index.php?option=com_content&view=article&id=151:2-billion-may-suffer-from-cell-phone-cancer-by-2020&catid=6:emfemr-information&Itemid=36.)

43 2008. The ICEMS (International Commission for Electromagnetic Safety) says: "World's Exposure Limits are 'inadequate' as only thermal effects are considered [referring to Health Canada, WHO, ICNIRP, IEEE and FCC.], and a global application of the PRECAUTIONARY PRINCIPLE is required and additional protection is needed for pregnancy, newborns, children, and elderly people. (Signed by 56 world-class scientists from 16 countries) (<http://www.icems.eu/resolution.html>)

44 2008. In the past 2 years alone Switzerland, France, Germany, Belgium and England have begun removing Wi-Fi from schools and public libraries other countries are pressing to do same.

45 2008. ICEMS. World's Exposure Limits are 'inadequate' as only thermal effects

are considered. A global application of the precautionary Principle is required and additional protection is needed for pregnancy, newborns, children, and elderly people.

46 April, 2009. The EU Parliament adopted, by 559 votes to 22, with 8 abstentions, a resolution on health concerns associated with electromagnetic fields (EMFs) which includes criteria for setting up [Cell Towers] and high-voltage power lines. They state: 'In this context, it is important to ensure at least that schools, crèches [nursery schools], retirement homes, and health care institutions are kept clear, within a specific distance determined by scientific criteria, of facilities of this type.'

(<http://emfsafetynetwork.org/wp-content/uploads/2011/12/CelltowerRptdoc.pdf>)

47 2010. Published by Canada's National Research Council (NRC) Press: "Many Canadians are being exposed to dangerous levels of radiation and concluded that a new biologically based guideline is needed, instead of the dangerous, outdated thermal guidelines. Authors: B. Blake Levitt and Henry Lai

(http://safeschool.ca/Health_Warnings.html)

48 2010. U.S. President Barack Obama's own Cancer Advisory Panel pointed to cell phones and other wireless technologies as potential causes of cancer, and recommended: "When credible evidence exists that there may be a hazard, use [a] precautionary approach."

(<http://willthomasonline.net/how%20to%20defend%20against%20smart%20meters.htm>)

25

49 2010. The Canadian National Research Council states: 'Many Canadians are being exposed to dangerous levels of radiation' and concluded that a new biologically based guideline is needed, instead of the dangerous, outdated thermal guidelines.'

50 2011. The Council of Europe and the European Parliament recognize for the first time biological effects of EMF on living plants, animals and human beings. The need now is to protect citizens from EMR, particularly pregnant women, newborn babies & children.

51 2011. The Council of Europe committee calls for ban of cell phones and Wi-Fi in all schools: 'immediate action is required to protect children ... it's crucial to avoid repeating mistakes concerning the dangers of asbestos, tobacco and lead.'

52 2011. Council of Europe (47 countries, 800-million people) Notes "Conflict of Interest" 33% of studies funded by industry find cell phones harmful to humans. Over 30% of studies NOT funded by industry find cell phones harmful to humans. This is a "manifestly unacceptable situation pointing to CONFLICTS OF INTEREST which undermine the integrity, the genuine independence and the objectivity of scientific research."

(<http://www.assembly.coe.int/Documents/WorkingDocs/Doc11/EDOC12608.pdf>)

53 2011. The Council of Europe and the European Parliament (47 countries, 800-million people) recognize for the first time biological effects of EMF on living plants, animals and human beings. The need now is to protect citizens from EMR,

particularly "pregnant women, newborn babies & children."

<http://www.safeinschool.org/2011/05/europes-may-2011-report-calls-for-ban.html>

(<http://www.magdahavas.com/wordpress/wp-content/uploads/2011/06/Weigel-2011.pdf>)

54 May 27, 2011. Council of Europe Urges Break from ICNIRP and WHO. News release, urged all 47 Governments to reconsider ICNIRP's Exposure Limits (which are followed by the WHO & Health Canada) "which have serious limitations and apply "as low as reasonably achievable" principles ... Governments should 'take all reasonable measures' to reduce exposure to EMFs.

(http://assembly.coe.int/ASP/_NewsManager/EMB_NewsManagerView.asp?ID=6685)

55 May 31, 2011. WHO Classified EMR a Class 2B Carcinogen "Possible" Cause of Cancer (http://www.iarc.fr/en/media-centre/pr/2011/pdfs/pr208_E.pdf)

56 2011. Council of Europe (47 countries – 800 million people) Committee called for ban of cell phones and Wi-Fi in all schools ... immediate action is required to protect children ... it's crucial to avoid repeating mistakes concerning the dangers of asbestos, tobacco and lead.

(<http://articles.mercola.com/sites/articles/archive/2011/06/02/european-leaders-call-for-ban-of-cell-phones-and-wifi-in-schools.aspx>)

57 2011. Resolution of the Russian National Committee on Non-Ionizing Radiation

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Protection (RNCNIRP). Electromagnetic Fields from Mobile Phones: Health Effects on Children and Teenagers. "statistical data published in 2009 and 2010 by ROSSTAT and UNICEF show that, since 2000 there has been a steady growth in the incidence of childhood diseases identified by RNCNIRP as "possible diseases" from mobile phone use. Of particular concern is the morbidity increase among young people aged 15 to 19 years (it is very likely that most of them are mobile phone users for a long period of time). (<http://www.magdahavas.com/international-experts%E2%80%99-perspective-on-the-health-effects-of-electromagnetic-fields-emf-and-electromagnetic-radiation-emr/>)

58 2012. "Concrete evidence" EMR causes cancer" Dr Annie Sasco, PhD. who worked 22 years in W.H.O.'s International Agency for Research in Cancer (IARC), including nine as Group Leader, then was Unit Chief of Epidemiology for Cancer Prevention said: "Despite the voices of industry-funded scientists saying otherwise there is concrete evidence that mobiles/cellphones and wi-fi cause cancer in humans." (http://www.youtube.com/watch?v=2JyAlO_UdSk)

59 2012. Ontario's English Catholic Teacher's Assn. (45,000 teachers) wants to ban new Wi-Fi installations in the province's 1,400-plus Catholic schools and wants computers in all new schools to be hard-wired. (<http://www.cbc.ca/news/canada/toronto/story/2012/02/13/toronto-oecta-wifi.html>)

60 2012. Russia Warns: Pregnant women: avoid using mobile phones entirely ... also children under 18. Austria, China, Germany, India, U.K., Israel, Finland, Belgium,

Ireland, Spain, Sweden & Toronto have issued health warnings for children: “use cell phones in emergencies – but only on speaker phone” Prof. Yury Grigoriev, Chairman of Russian National Committee on Non-ionizing Radiation Protection (NIRP)

61 2012. Wi-Fi in Schools. “UNICEF’s,” a children’s charity, own research found an 85% increase in central nervous system disorders, a 36 % increase in epilepsy, 11 % in psychiatric problems, 82 % in blood / immune disorders in children and risk to the fetus,“

(<http://www.cso.ie/en/newsandevents/pressreleases/2012pressreleases/statisticalyearbookofireland2012/>)

62 Oct. 2012. The AAEM (American Academy of Environmental Medicine) issued a public warning: Evidence clearly exists that EMR is harmful; don’t use Wi-Fi in schools! (<http://aacmonline.org/images/LettertoLAUSD.pdf>)

63 2012. Italy’s Supreme Court sides with a businessman who developed a tumor after using a cell phone for 12 years. This is the first time that a High Court—in any country - has ruled in favor of a link between mobile phone radiation and tumor development! (www.theatlantic.com/health/archive/2012/10/italian-supr...)

64 2002 / 2012. In the Freiburger Appeal, initially 50 doctors in Germany reported reduced therapeutic efficiency of prescribed drugs correlated with the use of pulsed microwaves, such as those from Mobile Telephone Masts. Some 40,000 signatories have now supported the appeal, including 1,200 doctors. Alongside the Freiburger

Appeal there are now similar appeals from Lichtenfelser, Hofer, Bamberger and Helsinki. (http://bioenergy.timleitch.net.nz/mast_dangers/cp-masts_awful-truth.htm)

65 2012. Nobel Co-laureate Dr Devra Davis has two videos that provide critical information about how all wireless devices (cell phones, cordless phones, wifi, cell towers etc.) harm our health. (<http://www.youtube.com/watch?v=Xtd-y2C9III4&feature=endscreen&NR=1>
<http://www.youtube.com/watch?v=a6wLFelrCtU&feature=related>)

66 BioInitiative 2012 Report. in part: Says RF EMF should be classified as a “human carcinogen”; Existing FCC, IEEE and ICNIRP [and Health Canada] guidelines ... do not protect us! Recommends Exposure Limit for chronic exposure > 3-6 million times lower/safer than Safety Code 6! (i.e. 0.3-0.6 nW/cm² vs 1000 uW/cm²). Says five new cell tower studies report bio-effects from ELF at levels 1,000 to 10,000 times lower than current exposure Limits provide for. Sufficient epidemiological evidence exists: EMF (power frequency magnetic fields) can be classified a Group 1 “Known Carcinogen”. (www.bioinitiative.org)

67 2013. A body of more than 6,000 studies has been accumulated since the 1930s producing an overwhelming conclusion that exposure to microwave and electromagnetic fields is significantly harmful to all life and health itself. (www.klinghardtacademy.com)

68 2013. Washington Times. In order to protect the general public, FCC, IEEE,

ICNIRP should immediately implement the Precautionary Principle in the matter of cell phone radiation and tighten the current safety standards. Also, a targeted and vigorous research program should be established to better evaluate the possible health risks that might be associated with the long-term avid use of cell phones.

(http://emrstop.org/index.php?option=com_content&view=article&id=173:leszczynski-fcc-icce-and-icnirp-should-tighten-safety-standards-&catid=31:emf-politics-a-research-analys)

69 May 2013. Swedish review strengthens grounds for concluding that radiation from cellular and cordless phones is a probable human carcinogen.

(<http://www.ncbi.nlm.nih.gov/pubmed/23664410>)

Ex 10.17

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Below is the link to the BioInitiative Report 2012: A Rationale for Biologically-based Exposure Standards for Low-Intensity Electromagnetic Radiation.

<http://www.bioinitiative.org/report/wp-content/uploads/pdfs/BioInitiativeReport2012.pdf>

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Not only do smart meters pose great health risks but they are also a fire hazard. We may never know the total number of fires caused by smart meters but we do have case report after case report of these harmful devices causing fires. Please see the below links for information on smart meters and fires.

<http://emfsafetynetwork.org/smart-meters/smart-meter-fires-and-explosions/>

<http://www.stopsmartmetersbc.ca/html/?p=4988>

With a little research you can probably find even more information on these harmful devices and the fires they are causing.

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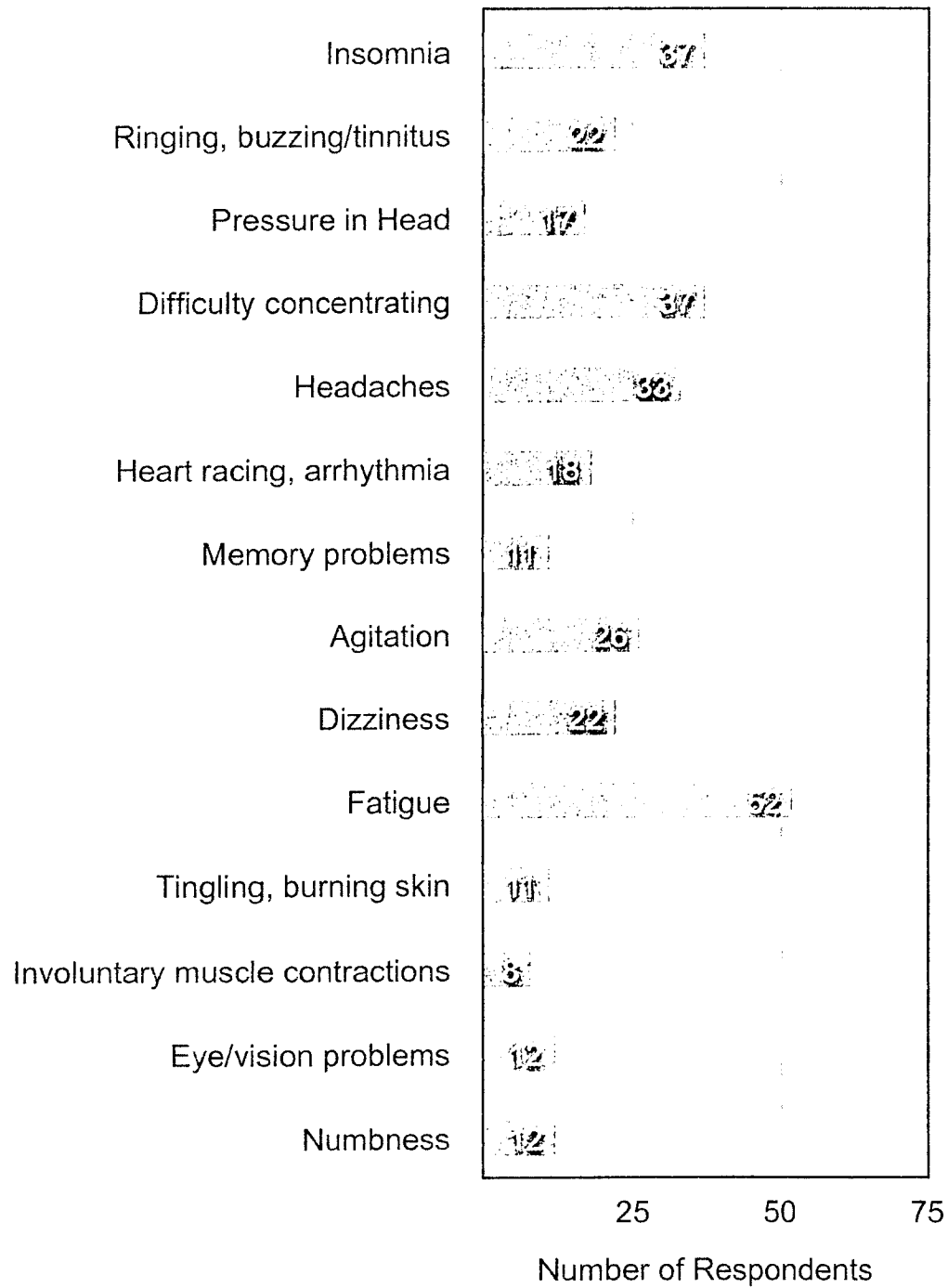
Start

56

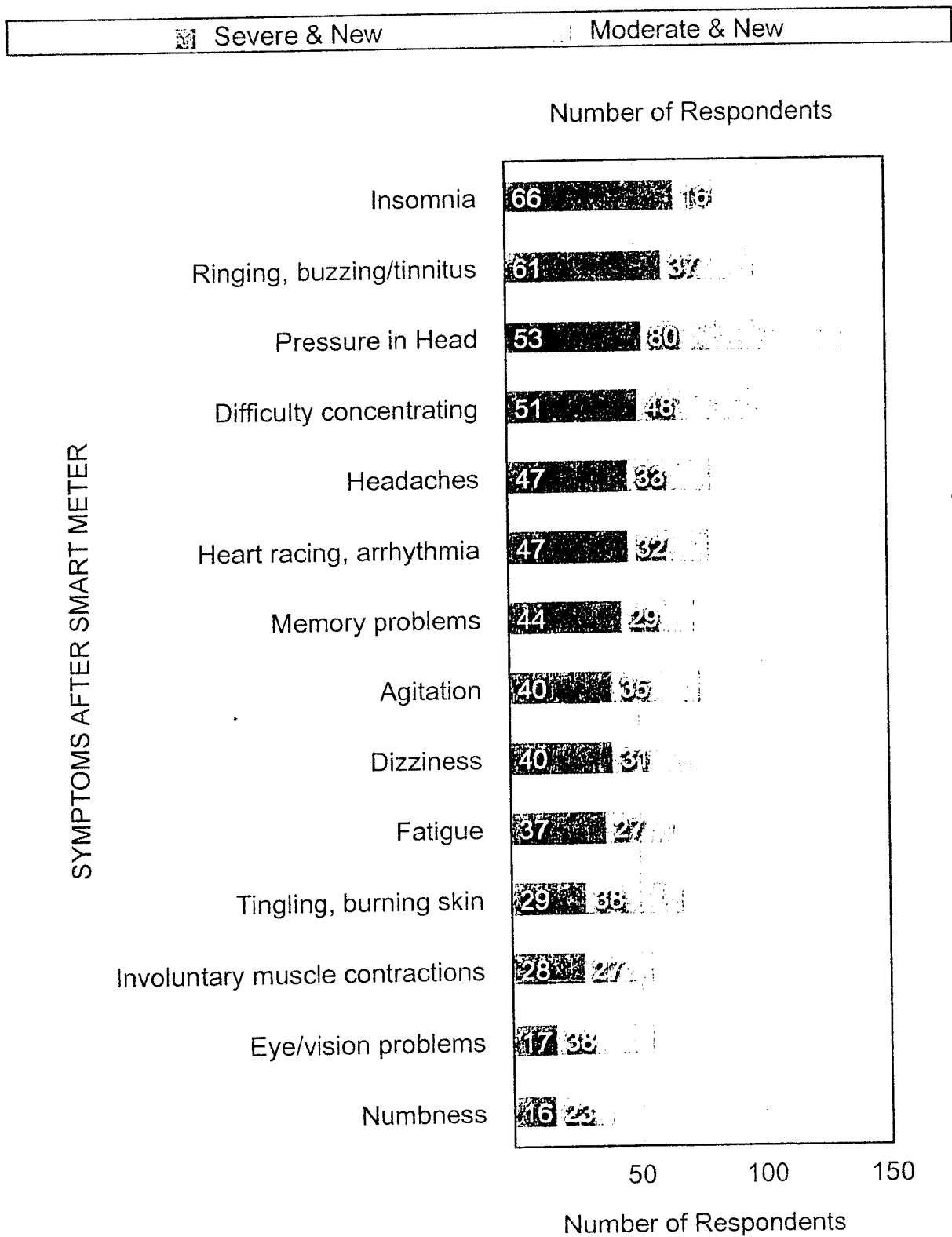
Severe & Worsened

Number of respondents who checked both Severe & Worsened

SYMPTOMS AFTER SMART METER



SYMPTOMS AFTER SMART METER



	A. Symptom Intensity AFTER Smart Meter Exposure			B. Symptom Category	
	MILD	MODERATE	SEVERE	New	Worsened
Agitation	15.2% 22	40.0% 56	44.8% 65	63.6% 91	37.1% 50
Difficulty concentrating /attention deficits	10.2% 6	34.4% 49	55.4% 81	54.3% 77	46.3% 65
Digestive problems	21.9% 29	48.2% 68	32.5% 47	51.4% 74	48.6% 67
Dizziness	16.3% 22	37.8% 53	45.9% 66	67.2% 95	32.8% 46
Eye/vision problems	19.5% 28	58.6% 84	21.9% 32	57.7% 83	43.9% 63
Fatigue	8.3% 6	34.4% 49	58.0% 84	46.2% 67	53.8% 77
Flu-like symptoms	27.4% 39	49.1% 70	23.6% 34	70.8% 102	29.2% 42
Headaches	12.2% 16	34.0% 49	53.8% 78	61.4% 89	38.6% 56
Heart racing, arrhythmia or palpitations	12.2% 1	39.6% 56	48.2% 70	69.9% 102	30.1% 43
High blood pressure	33.3% 47	41.7% 60	26.7% 39	68.5% 100	31.5% 45
Insomnia	10.0% 14	28.8% 41	61.2% 89	56.0% 81	44.6% 64
Involuntary muscle contractions	27.6% 39	39.0% 56	35.2% 51	73.5% 106	27.6% 40
Low blood pressure	37.8% 54	44.4% 64	17.8% 26	41.9% 61	58.1% 85
Memory problems	16.2% 22	43.4% 62	40.4% 59	64.3% 93	35.7% 52
Nosebleeds	54.1% 77	34.4% 49	11.5% 17	75.5% 109	24.5% 35
Numbness in hands or feet	29.0% 42	43.0% 62	29.0% 42	60.6% 88	41.5% 60
Pressure in head	13.4% 19	34.3% 49	53.0% 77	76.3% 111	23.7% 34
Respiratory problems	21.1% 30	50.0% 72	30.0% 43	62.0% 90	38.0% 55
Ringing, buzzing or tone in ears/tinnitus	11.0% 16	36.0% 52	53.0% 77	67.3% 99	32.7% 47
Tingling, burning or itching skin	19.1% 27	45.5% 66	36.4% 52	75.5% 109	25.5% 37
Tingling, burning or itching internally	27.7% 40	41.5% 60	30.8% 44	77.4% 113	22.6% 33

15. GROUP A: Symptom Intensity AFTER smart meters; click only one box:

APPENDIX 5

Symptom Intensity AFTER Smart Meter Exposure

	MILD	MODERATE	SEVERE	Total
Agitation	15.2% 22	40.0% 57	44.8% 65	100% 144
Difficulty concentrating/attention deficits	10.2% 15	34.4% 51	55.4% 82	100% 147
Digestive problems	21.9% 32	48.2% 71	32.5% 49	100% 152
Dizziness	16.3% 24	37.8% 56	45.9% 68	100% 147
Eye/vision problems	19.5% 29	58.6% 87	21.9% 33	100% 147
Fatigue	8.3% 12	34.4% 51	58.0% 87	100% 150
Flu-like symptoms	27.4% 41	49.1% 73	23.6% 36	100% 150
Headaches	12.2% 18	34.0% 51	53.8% 81	100% 149
Heart racing, arrhythmia or palpitations	12.2% 18	39.6% 59	48.2% 73	100% 150
High blood pressure	33.3% 50	41.7% 63	26.7% 40	100% 153
Insomnia	10.0% 15	28.8% 43	61.2% 92	100% 150
Involuntary muscle contractions	27.6% 41	39.0% 58	35.2% 53	100% 152
Low blood pressure	37.8% 56	44.4% 67	17.8% 27	100% 150
Memory problems	16.2% 24	43.4% 65	40.4% 61	100% 150
Nosebleeds	54.1% 81	34.4% 51	11.5% 17	100% 149
Numbness in hands or feet	29.0% 43	43.0% 65	29.0% 44	100% 152
Pressure in head	13.4% 20	34.3% 51	53.0% 80	100% 151
Respiratory problems	21.1% 32	50.0% 75	30.0% 45	100% 152
Ringing, buzzing or tone in ears/tinnitus	11.0% 16	36.0% 54	53.0% 80	100% 150
Tingling, burning or itching skin	19.1% 29	45.5% 68	36.4% 55	100% 152
Tingling, burning or itching internally	27.7% 41	41.5% 62	30.8% 46	100% 149

15. GROUP B: Symptom Category; click only one box:

Symptom Category

	New	Worsened	Total
Agitation	63.6% 91	37.1% 50	100%
Difficulty concentrating/attention deficits	54.3% 81	46.3% 75	100%
Digestive problems	51.4% 56	48.6% 52	100%
Dizziness	67.2% 91	32.8% 44	100%
Eye/vision problems	57.7% 79	43.9% 59	100%
Fatigue	46.2% 73	53.8% 80	100%
Flu-like symptoms	70.8% 96	29.2% 40	100%
Headaches	61.4% 84	38.6% 52	100%
Heart racing, arrhythmia or palpitations	69.9% 93	30.1% 40	100%
High blood pressure	68.5% 92	31.5% 42	100%
Insomnia	56.0% 77	44.6% 59	100%
Involuntary muscle contractions	73.5% 99	27.6% 37	100%
Low blood pressure	41.9% 58	58.1% 78	100%
Memory problems	64.3% 87	35.7% 48	100%
Nosebleeds	75.5% 103	24.5% 33	100%
Numbness in hands or feet	60.6% 83	41.5% 56	100%
Pressure in head	76.3% 104	23.7% 32	100%
Respiratory problems	62.0% 85	38.0% 51	100%
Ringing, buzzing or tone in ears/tinnitus	67.3% 92	32.7% 44	100%
Tingling, burning or itching skin	75.5% 103	25.5% 34	100%
Tingling, burning or itching internally	77.4% 105	22.6% 30	100%

Survey 832110

CommentsQ46, Jan30

Survey: Smart Meter Health Effects Survey (Live Dec. 4, 2012)

46. You can enter additional health-related comments in the space provided below, including if you wish, a short summary of the impacts smart meters have had on your life. (Your entry is limited to 300 words).

ResponseID Response

- 1 SMs installed 1/24/12. Felt fine until went to bed on 1/24/12, sick all night and woke up 1/25/12 really sick. Discovered SM on neighbor's house outside my bedroom window 25 feet from head of my bed. Called FPL and confirmed meter had been installed on prior afternoon. Haven't had a single good day or decent night's sleep since installation. It was a dramatic change in my health, which has continued to deteriorate. I've had a dramatic change in my behavior/personality, too. I cry at the drop of a hat. I get irritable and argumentative. Restless to the point of pacing. I've developed a cough over the last month not associated with any cold, influenza, etc. I attribute it to worsening health from RF radiation. I have lost roughly 18 years of progress in my treatment of my CFIDS and MCS. My CFIDS had been quite mild, but now is almost as bad as when I first got sick 23 years ago. My MCS has gotten somewhat worse, too.
- 3 Smart meters have restricted my access to friends, family, public services, and certain neighborhoods. Ban them.
- 6 my life is over.havent slept in 3 yrs now.my cats are being tortured by the devices as well,and there is no where to go.i have parkinsons like symptoms frequently,all good memories of my life are gone.no one left to call,no where to go,no way to get there.doctor is more harm than good,politicians dont care.billions of bats and frogs thrived here before "deployment.they and all life in the creek are gone forever now.trees are dying a slow death for miles,and if it werent for leaving a kid and 6 feline family members behind ...well...i really see no reason to live.there is no more joy in my life.it is a constant stressfull struggle each and every day with no light at the end of the tunnel.mercury/cadmium/nickel dentistry started my disabilities,and smartmeters zapped what life i had left.hope the dentists and utilities profiting enjoy their beachfront houses.their professions have cost me all hope for a normal life.if there were justice in this world,these people and their poisonous products would be behind bars.my friend has gone from 235lbs to 400+lbs. since this program started,and he will need oxygen tanks soon.his dad died relatively soon after deployment.the cells of every living creature in this state is under constant and consistent stress.god help us all
- 8 Type A personality, loved to work. Had had chemical sensitivity for years. Big mold toxin exposure made me super MCS and gradually EMF sensitive. Smart meters made me even more EMF sensitive, and now homeless and unable to work for the last 4 years. Biggest loss is the joy of being able to work, and to be productive. not just the financial loss which has been huge. Life for the next 4

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years has been totally about survival. Had to get out of escrow 7 times, 1/2 from mold and 1/2 from nearby wi-fi. Electrical sensitivity is real and extremely limiting - few safe places to go free of EMF. Family (except for wife, who is also electrically sensitive) don't believe me - that's the worst - because it is an intangible, invisible disability that they have never experienced themselves.

- 9 I am electrosensitive and have taken measures to limit exposure to EMF/RF. I do not have WiFi in my home. I refused installation of a smart meter by SMUD and have been active in trying to bring awareness to this issue. Recently via a public records request, I found out that SMUD installed a digital meter on my home in 2007 without my permission. According to SMUD, this meter sends out an RF pulse every 30 seconds. This correlates with onset and aggravation of many health related symptoms to myself and my family. My son's bedroom and bed is not far from this meter. He was entering the 4th grade when this meter was installed. In 3rd grade, he was recommended for a special program for advanced and gifted children. In 4th grade, he refused to write or draw saying, "I can't". Later, behavioral problems developed. In 2010, he was evaluated and deemed to have ADD. He continues to struggle and has also complains of ringing in his ears. He is also fatigued and irritable. I also thought it was odd that he never dreams. I believe the digital meter is responsible for this. According to my research, RF/EMF affects the brain and disrupts proteins needed for brain function. This is backed by more than 2300 research studies, many done by the Naval Medical Research Institute and Yale showing repeatable harmful results. How can this be ignored and disregarded because the FCC says 'no thermal radiation', so it's safe. This is outrageous!!! I want these dirty polluting health wrecking devices off of my home and a return to safe analog meters nationwide. No one deserves to suffer like this. Even those that do not notice the effects are still getting a cumulative exposure that will eventually cause damage.

- 12 Before smart meters, I had worked in an office full of computers and wi-fi and had no electrical sensitivities. I had not even heard of electrical sensitivities, and had no concerns about smart meters. Both my wife and myself began to develop mysterious symptoms that we never had before, and then more than a week after the symptoms began, we discovered that smart meters had been installed before we first developed the symptoms. Because of smart meter exposure I am now extremely electrically sensitive and can no longer safely live in our San Francisco home. I went from being a perfectly healthy 35 year old to being electrically sensitive in a matter of weeks. The limitations of this condition are extraordinary. I do not know how much longer I will be able to work at my financial services firm. Nor do I know how much longer I will be able to live in a city or town with a cell phone tower. Once a person becomes sensitized to microwave radiation, life becomes completely different, and difficult. I have constant headaches, unless I am in nature. My ears ring if I am within miles of a cell tower. I have fatigue if I am around wi-fi for too long. Using a cell phone for calls or internet functions has become impossible. I used all of the above technology just 15 short months ago with no problems. I had no idea such technology could be harmful. Now my wife and I search for a safe place to live and I look back fondly on the days I could use a computer without symptoms. I know that many, many others are going through similar situations - all since

installation of smart meters. Something must be done.

- 15** In January 2012, during our absence while boondocking near Bouse, Arizona, thirteen smartmeters were installed within 2.5 metres from our townhouse's outside wall, in BC Hydro's Electrical Room. My wife and I have felt the negative effects ever since our return on the 29th of February, each with different symptoms. She is 71 and I am 70. Note that we do not have a smartmeter for our own townhouse unit, as this is still an analog meter, located in between the smartmeters. We call it the "Lone Ranger" and have asked BC Hydro several times to remove the thirteen smartmeters, without any response. Our initial request not to have a smartmeter was granted by BC Hydro. We are afraid that they will come one of these days and replace it anyway. Our townhouse is listed "For Sale" with a realtor. The natural gas company (FortisBC) now wants to install four AMS devices on the outside wall of our townhouse. This will aggravate the situation and decrease the "relatively safe living space" in our townhouse. We have not even been in our living room for the past half a year! One additional thing: After our return from Arizona, we started to use another car that we had bought in December 2011. This is a 2003 GMC Tracker - with more internal electronics than our former car, a 1997 Nissan Altima. While driving, my lower legs hurt in this vehicle, and never did before. Our other vehicle is a 1993 GMC Sierra 1-ton diesel truck, used to pull our 5th wheel trailer with solar panels and a small inverter. In a few weeks, we hope to test our health again by escaping our townhouse. This past summer, we went to Alberta for three weeks and our health condition improved in the trailer.
- 17** The side effects got worse neurologically for me it took months for me to recover after the smart meters were removed from my neighbors homes. I did not have a meter on my home. I called FPL and begged them to remove the meters that I was very ill they declined and I had a seizure and was rushed by EMS to the ER.
- 20** Since the smart meter GRID was placed in my community, I cannot sleep. I opted out but two of my immediate neighbors didn't. Worse, the electric poles with big new transformers are right outside my house and I experiencing an electric pulse under me all night long. I can't sleep. My CPUC complaint was ignored (I got a boiler plate response back), and I have done tons of remediation in my house to isolate the problem, and am sure it is due to the smart meters and smart meter grid. I am selling my house and moving to off grid Dominica. My survival is at stake.
- 22** Ability to work or find a place to work, visit friends, go to the post office, go grocery shopping, etc be active in my community or play has become impossible. I need to move again and it is getting increasingly more difficult to find a community where I can live. This is depressing enough but I worry about the depression that can set in when I'm inadvertently exposed as more and more territory around me is being installed. Now i have become so sensitized that driving through areas is incredibly uncomfortable. It sucks when you have to decide where to live based on the electric company you will be paying for service. I moved to FL for the sun and sand not expecting to get burnt and now I can't live on any stretch of coast line due to the metering. I sure as heck didn't

THE BRITISH COLUMBIA RESOLUTION ON THE PROLIFERATION OF ELECTROMAGNETIC RADIATION.

Petition by Ron Gordon

To be delivered to BC Provincial Health Office

THE BRITISH COLUMBIA RESOLUTION ON THE PROLIFERATION OF
ELECTROMAGNETIC RADIATION.

THE HAZARD:

Whereas the population of the Province of British Columbia is not currently protected by effective and authoritative guidelines or regulations governing exposure to involuntary or incidental, non-thermal, electromagnetic radiation in their homes and public places, the British Columbia, Canada, organization - Citizens for Safe Technology - in collaboration with the undersigned, hereby passes the following Resolution.

THE RESOLUTION:

1 Guidelines and regulations to protect the population of British Columbia from the



effects of all forms, frequencies and intensities of electromagnetic radiation must be immediately instituted.

2 The guidelines and regulations mentioned in Article 1 must be based on the findings of independent, non industry-affiliated studies which include, but are not limited to, research into the effects of low-level, non-thermal pulsed radiation; (1)

3 The Provincial Health Officer for British Columbia must publicly acknowledge and immediately invoke the Precautionary Principle (2) with regards to the protection of the population of the Province of British Columbia against the known and/or potential harmful acute and chronic effects of exposure to all forms, frequencies and intensities of electromagnetic radiation; and

4 Direct and immediate action must be taken to halt the proliferation of, and subsequently reduce, the non-consensual exposure of children and pregnant mothers to electromagnetic radiation in all areas of society, most notably through the removal of wireless internet connections in schools, libraries, and other public places.

THE EVIDENCE:

1 The British Columbia Provincial Health Officer has, to date, relied on the guidelines offered by Health Canada in Safety Code 6 to assert that exposure levels within the province are within acceptable levels. However, Health Canada acknowledges (3) that these guidelines are based purely on thermal effects and are intended to apply solely

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to federally regulated sites. Consequently, they have questionable application in the protection of the general public since they have no authority or application in the protection of the population of the Province in their homes or public places.

Furthermore, strong scientific evidence shows that the levels of (thermal) radiation that Health Canada deems safe for the adult population do not provide adequate protection for children. (4)

The Health Canada guidelines state in the preamble: 'Safety limits in this code apply to all individuals working at, or visiting, federally regulated sites. These guidelines may also be adopted by the provinces, industry or other interested parties.'

WorkSafe BC, which regulates the welfare of employees, has adopted Health Canada's Safety Code 6 but as previously noted, this is neither intended nor adapted to provide protection to the public, and considers only the thermal effects of electromagnetic radiation.


2 The Radiofrequency Toolkit for Environmental Health Practitioners, published in 2013 by The British Columbia Centre for Disease Control and commissioned by the British Columbia Provincial Medical Officer, acknowledges that there is conclusive evidence of biological damage caused by exposure to EMR. (Section 10 - Mobile Phones, Radiofrequency Waves, and Male Infertility). Consequently, through inaction, the British Columbia Provincial Medical Officer is placing in jeopardy the health of the population of the Province and, in particular, the health and mental development of children who numerous studies and reports identify as being at increased risk caused by exposure to Electromagnetic Radiation. (4) (31) (39) (41) (44) (45) (46) (50) (51) (53) (56) (57) (59) (60) (61) (62)

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The Radiofrequency Toolkit for Environmental Health Practitioners states:

- ‘A large increase in induced fields for children’s bone marrow was attributed to its higher conductivity compared with that of adults.’
- ‘For the same emitted power, children and fetuses experience higher SAR.’ (5)
- ‘Whole body exposure at frequencies in the range of 80 to 180 MHz and 1–4 GHz to ICNIRP reference exposure levels may expose children and small persons (shorter than 1.3 m) to above acceptable ICNIRP SAR levels.’ (6)
- ‘Children may potentially be at greater risk for adverse health outcomes resulting from exposure to RF.’
- ‘Because the brain is particularly vulnerable to environmental insults during fetal development, childhood and adolescence, there is a need for further studies to ascertain whether there are effects during their developmental stages.’
- ‘Unlike the mixed findings found in occupational health studies of radar EMF exposures, the epidemiological studies of men assessed for infertility were consistent in demonstrating decreased sperm motility associated with increased use of mobile phones.
- ‘Apart from the known thermal effects of RF, oxidative stress due to increased Reactive Oxygen Species (ROS) or decreased antioxidants is a plausible explanation for non-thermal effects of RF on sperm cells.’

It is therefore incumbent upon the Provincial Health Officer to heed the findings of the Radiofrequency Toolkit and immediately invoke the Precautionary Principle.

3 This Resolution also is based on an accumulation of international research demonstrating beyond doubt genotoxicity from electromagnetic radiation, and is 

supported by various international resolutions (7) calling for a cessation or reduction of the levels of exposure to such radiation in society. These documents offer unequivocal evidence of biological damage to persons caused by exposure to electromagnetic radiation at levels significantly below those deemed safe by the British Columbia Provincial Health Officer. A partial list of references, representative of many others whose inclusion is limited only by space, can be found in the Appendix to this Resolution.

It is therefore strongly recommended that, based on the findings of The Radiofrequency Toolkit for Environmental Health Practitioners and the numerous references in the Appendix to this document, the province must formulate clear and comprehensive guidelines and regulations that provide adequate protection for the public at large.

APPENDIX:

1 The FCC's current exposure guidelines, as well as those of the Institute of Electrical and Electronics Engineers and the International Commission on Non-ionizing Radiation Protection, are thermally based, and do not apply to chronic, non-thermal exposure situations. They are believed to protect against injury that may be caused by acute exposures that result in tissue heating or electric shock and burn. The hazard level (for frequencies generally at or greater than 3 MHz) is based on a specific absorption dose-rate, SAR, associated with an effect that results from an increase in body temperature. The FCC's exposure guideline is considered protective of effects arising from a thermal mechanism but not from all possible mechanisms. Therefore,

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the generalization by many that the guidelines protect human beings from harm by any or all mechanisms is not justified.

2 Precautionary Principle: The precautionary principle or precautionary approach states if an action or policy has a suspected risk of causing harm to the public or to the environment, in the absence of scientific consensus that the action or policy is harmful, the burden of proof that it is not harmful falls on those taking an act. (Wikipedia)

3 Health Canada scientist, James McNamee, admitted in Quebec Superior Court in Feb. 2013 that for frequencies between 100 kHz and 300 GHz Safety Code 6 is based only on heating. (<http://www.magdahavas.com/health-canada-admits-safety-code-6-guideline-for-microwave-radiation-is-based-only-on-thermal-effects/>)

4 Dr. Glaser (Ph.D.), the former head of the U.S. Navy Microwave Laboratory and subsequently with the US Food and Drug Administration, when asked whether Health Canada's assurances that microwave radiation from Wi-Fi is 'safe' for children said: 'They're either giving you partial information, or they're giving you misinformation. Because there is scientific consensus that microwaves cause biological effects. There is scientific consensus that children are more vulnerable. And there is no evidence whatsoever that it is safe for children. That is no foundation on which to declare something is safe.'

5 SAR: Specific Absorption Rate.

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6 ICNIRP: The International Commission on Non-Ionizing Radiation Protection.

7 EMF resolutions signed by concerned scientists and medical doctors

The following list of Resolutions are signed by scientists, engineers and medical doctors who have been doing EMF research and working internationally on electromagnetic fields health and safety. The combination of their training, experience and the many contributions they have made in conducting and publishing, represents hundreds of years of expertise and places them at the forefront of knowledge about EMF:

Vienna Resolution 1998

(www.icems.eu/docs/resolutions/Vienna_Resolution_1998.pdf)

Salzburg Austria Resolution 2000

(http://www.salzburg.gv.at/salzburg_resolution_e.htm)

Freiburger Appeal 2002 (www.laleva.cc/environment/freiburger_appeal.html)

Catania Italy 2002 (www.emrpolicy.org/faq/catania.pdf)

Benevento Italy Resolution 2006 (http://www.icems.eu/benevento_resolution.htm)

Venice Italy Resolution 2008 (<http://www.icems.eu/resolution.htm>)

Porto Alegre Resolution 2009 (http://www.icems.eu/other_res.htm)

8 Many countries - New Zealand, Italy, China, Bulgaria, Hungary, Russia,

Switzerland, Austria and New South Wales, Australia - have lower limits that factor in the non-thermal cumulative effects, which have been shown to occur at levels thousands of times lower than the thermal effects. (<http://emfsafetynetwork.org/wp->

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content/uploads/2011/12/CelltowerRptdoc.pdf)

9 Doctors/Scientists Call for Moratorium or Stricter Guidelines on All WiFi Devices:

Brussels Appeal 2007

Berlin Appeal 2008

Venice Resolution 2008

London Resolution 2009

Paris Appeal 2009

Porto Alegre Resolution 2009

Dutch Appeal 2009

EMF Resolution 2009

Seletun Consensus Statement 2010

Copenhagen Resolution 2010

Int'l Appeal of Würzburg 2010

European Parliament

(http://www.cellphonetaskforce.org/?page_id=128)

10 1967. 'Pulsed microwave more dangerous than continuous wave'. So says Herbert Pollack, M.D., on behalf of the Institute for Defense Analysis Research and Engineering Support Div. (http://www.magdahavas.com/wordpress/wp-content/uploads/2010/07/Pollack_19671.pdf)

11 1971. US Naval Medical Research researched 2300 studies listing all illnesses



resulting from thermal and non thermal effects of Radio / Microwave Frequency EMR. They paid particular attention to the effects on man of non-ionizing radiation.

Zorach R. Glaser, Ph.D. LT, MSC, USNR Research

(http://www.magdahavas.com/wordpress/wp-content/uploads/2010/06/Navy_Radiowave_Brief.pdf)

12 1971. The U.S. President's own Management Advisory Council warned: 'power levels in and around American cities, airports and homes may already be

biologically significant.' The population at risk 'may well be the entire population.'

The consequences of undervaluing or misjudging the biological effects of long-term, low-level exposure could become a critical problem for the public health, especially if genetic effects are involved.

13 1975. The U.S. Defense Intelligence Agency (DIA) warned its own personnel of the risks from low level EMR including: microwave sickness (flu-like symptoms, depression, suicidal tendencies) to cancers and leukemia

(www.wirelesswatchblog.org/wp-content/uploads/2001/11/20)

14 1977. Microwaves: Their Deadly Risk and the Cover-up. 'Microwave radiation can blind you, alter your behaviour, cause genetic damage, even kill you. The risks have been hidden from you by the Pentagon, the State Department, and the electronics industry.' The Zapping of America. Paul Brodeur (1977)

15 1979. NIOSH (National Institute for Occupational Safety and Health) and OSHA

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(Occupational Safety, Health Agency) believe there is sufficient evidence of harmful non-thermal effects to humans, they recommend that precautionary measures be instituted to minimize the risk to workers from unwarranted exposure to RF energy (www.cdc.gov/niosh/docs/80-107/)

16 1986. Eldon Byrd, a scientist for the Naval Surface Weapons Centre, USN, said about M/W radiation: ‘We can alter the behaviour of tissues, cells, organs and whole organisms.... you can cause up to six times higher foetus mortality and birth defects in laboratory animals, and these fields are so weak you can hardly detect them...’

17 1989. Pulsed EMFs cause cancer in a study of electric utility workers in Quebec (follow-up, 1970–1988) and France (follow-up, 1978–1989): 2,679 cases of cancer were identified. (Hydro Quebec was furious that the results were published and stopped further research.) (<http://aje.oxfordjournals.org/content/140/9/805.abstract>)

18 1990. The U.S. Environmental Protection Agency’s (EPA)’s Draft report recommended EMR be classified 2B “Possible” carcinogen. 33 of 35 international research studies conclusively linked EMR to brain tumors, leukemia & other forms of cancer, etc., but Pres. H.W. Bush’s White House quashed recommendation due to pressure from US Military, Telecom/wireless Industries. Electromagnetic Radiation. Chloe Wadsworth.

19 1990. The U.S. Environmental Protection Agency (EPA) says power line EMF is a “probable carcinogen.” A leaked EPA document concluded that power line EMF

should be classified a "probable (2A) human carcinogen." William Farland, then-director of the EPA's Office of Health and Environmental Assessment ordered this conclusion deleted from the report.

(<http://bizgenerationnetwork.blogspot.ca/2012/07/lynas-cancer-and-you.html>)

20 1993. The U.S. Food and Drug Administration (FDA) Data "Strongly Suggest" Microwaves can promote cancer. FDA biologists concluded that the available data "strongly suggest" that Microwaves can "accelerate the development of cancer."

(<http://microwavenews.com/news/backissues/j-f03issue.pdf>)

21 1993. Dr. George Carlo PhD, JD, conducted the Telecom Industry's own six-year (1993-1999), USD \$28.5-million study intended to prove that cell phones are safe. The study proved precisely the opposite. Dr. George Carlo was Head of Project. His report concluded: 1) Federal microwave exposure standards are dangerously high, and 2) Cell damage and tumors can be easily induced in the lab at about one-third of the FCC's exposure guidelines. (<http://www.leaf lady.org/ElectroSmog.htm>)

(http://www.lef.org/magazine/mag2007/aug2007_report_cellphone_radiation_01.htm)

22 1998. NIEHS (National Institute of Environmental Health Sciences) Classified ELF EMFs a 2B "Possible" Carcinogen. (Electrical sub-stations, power lines, house wiring electrical appliances) (<http://lifeenergies.com/he-emr>)

23 1999. U.S. Consumer Affairs Commission said: 'Current thermal guidelines associated with EMR are irrelevant. Cancer and Alzheimer's are associated with non-

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thermal EMR effects.' (<http://lifeenergies.com/he-emr/>)

24 2001. The WHO's own IARC (International Agency for Research on Cancer) said ELF EMFs are "Possible Carcinogens." Twenty-one scientists from 10 countries unanimously find ELF EMFs are a Class 2B "Possible" carcinogen (Electrical sub-stations, power lines, house wiring, electrical appliances)

Microwave News July/August 2001 <http://www.emfwise.com/powerline.php> and www.microwavenews.com

25 2002. FCC (Federal Communication Commission – none of whom are scientists) set microwave radiation levels more than 10,000 times HIGHER than levels which, according to the EPA, were causing illnesses all over the world!

<http://lifeenergies.com/he-emr/>

26 2002. Freiburger Appeal. Signed by more than 6,000 German doctors, lists 13 severe chronic illnesses & various disorders involving: behaviour, blood, heart, cancers, tinnitus, migraines, susceptibility to infections and sleeplessness, all of which they ascribed to pulsed M/W from mobile communications devices.

<http://omega/twoday.net/stories/555926/>

27 2002. US EPA acknowledges FCC guidelines for radiation exposure are outdated, stating in a letter: "The FCC's current exposure guidelines, as well as those of the Institute of Electrical and Electronics Engineers (IEEE) and the International Commission on Non-ionizing Radiation Protection, are thermally based, and do not

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apply to chronic, non-thermal exposure situations.

<http://www.aemc.gov.au/Media/docs/Market-Review-Submission-EP10022---Helen-Weir---121009---Supporting-document-3-85f00cf2-edec-4fb3-9ce4-d3166da1e356-0.PDF>

28 2003. Toronto's Public Health Officer recommended Health Canada's Safety levels for microwave exposure be lowered by a factor of 100 times.

http://www.opha.on.ca/What%20We%20Do/Position%20Papers/papers/2003-02_pp.pdf

29 2003. The Ontario Public Health Association (OPHA) urges Health Canada to introduce strict governmental research, quality control and testing of cell phones available in Canada. The recommendation by Toronto Public Health to reduce the SC6 exposure limits by a factor of 100 has merit and deserves serious consideration by Health Canada.

http://www.opha.on.ca/What%20We%20Do/Position%20Papers/papers/2003-02_pp.pdf

30 2003. Swisscom, the leading telecom provider in Switzerland, reveals the true danger of WiFi in a patent application. It devised a way to reduce the microwave radiation from Wi-Fi LANs. In its patent application, Swisscom clearly states the elevated risk of cancer and genetic damage from the constant low level microwave/RF exposure from WiFi. http://www.safeschool.ca/Swisscom__WiFi_Harms.html



31 2003. UK Education Secretary David Blunkett bans cell phones from all schools in England and Wales, saying mobile phones should only be used by pupils under 16 in emergencies.

32 2004. Radio Frequencies are dangerous. There are well over 10,000 scientific reports from many countries around the world, many of them dating back to the 1950's, verifying that high frequency energy shoots straight into the brain, is absorbed by the brain cells, heats them up and damages the DNA.

www.mercola.com U.S Senate Committee Confirms Dangers of Cell Phones,
<http://emf.mercola.com/sites/emf/archive/2010/01/21/US-Senate-Committee-Confirms-Dangers-of-Cell-Phones.aspx>

33 2005. Corruption in the WHO. On July 5, 2005, it was published that Dr. Michael Repacholi - Coordinator of the WHO's 10-year, \$250-million International Project to study the harmful effects of EMR and EMFs- receives \$150,000 a year (via Royal Adelaide Hospital, S.A.) from the cellular phone industry with additional money for meetings and travels. (microwavenews.com 5.7.05)

34 2005. The National Institute for Occupational Safety and Health (NIOSH) recognized Electromagnetic Sensitivity (EHS) – fifty-five (55) years after the Soviet Union!

35 2007. Toronto's Chief Medical Officer of Health recommends Health Canada's Safety levels for microwave exposure be lowered by a factor of 100X (that's the 3rd



recommendation over four years!) http://safeschool.ca/Health_Warnings.html)

36 2007. BioInitiative Report. Twenty doctors, 10 countries, 2,000 studies. Urged all countries to reduce their Exposure Limits. To comply Safety Code 6 would need to be reduced 10,000 times.

37 2007. The European Environment Agency called on its 27 Member States (500-million people) to: “protect the public more effectively by taking ‘Appropriate, precautionary and proportionate actions ... to avoid ... serious threats’
(www.europarl.europa.eu/sides/getDoc.do?language=EN&reference=A6-0089/2009#title)

38 2007. Israel bans antennas on residences
(http://www.democrats.org.au/docs/2007/Joining_the_Dots11.pdf)

39 2007. Taiwan removes 1500 cell towers near schools
(<http://www.chinapost.com.tw/taiwan/2007/11/06/129715/1500-cellphone.htm>)

40 2008. The European Union Parliament (27 countries, 500-million people) accepts premise of Bio-Initiative 2007 report concerning EMFs and says today’s EMF Exposure Limits are obsolete. (http://safeschool.ca/Health_Warnings.html)

41 2008. European Union countries: In the past 2 years alone Switzerland, France, Germany, Belgium and England have begun removing Wi-Fi from schools and public

libraries other countries are pressing to do same.

(<http://www.msnbc.msn.com/id/34509513/ns/health-cancer/t/electrosmog-harming-our-health/#.UPnBRK2mTp>)

42 2008. The Australian Health Research Institute studies indicate that almost one-third of world's population (about two billion) will suffer from ear, eye and brain cancer, and other major body disorders like heart ailments, impotency, migraines, epilepsy.

(http://emrstop.org/index.php?option=com_content&view=article&id=151:2-billion-may-suffer-from-cell-phone-cancer-by-2020&catid=6:emfemr-information&Itemid=36.)

43 2008. The ICEMS (International Commission for Electromagnetic Safety) says: "World's Exposure Limits are 'inadequate' as only thermal effects are considered [referring to Health Canada, WHO, ICNIRP, IEEE and FCC.], and a global application of the PRECAUTIONARY PRINCIPLE is required and additional protection is needed for pregnancy, newborns, children, and elderly people. (Signed by 56 world-class scientists from 16 countries) (<http://www.icems.eu/resolution.html>)

44 2008. In the past 2 years alone Switzerland, France, Germany, Belgium and England have begun removing Wi-Fi from schools and public libraries other countries are pressing to do same.

45 2008. ICEMS. World's Exposure Limits are 'inadequate' as only thermal effects

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are considered. A global application of the precautionary Principle is required and additional protection is needed for pregnancy, newborns, children, and elderly people.

46 April, 2009. The EU Parliament adopted, by 559 votes to 22, with 8 abstentions, a resolution on health concerns associated with electromagnetic fields (EMFs) which includes criteria for setting up [Cell Towers] and high-voltage power lines. They state: 'In this context, it is important to ensure at least that schools, crèches [nursery schools], retirement homes, and health care institutions are kept clear, within a specific distance determined by scientific criteria, of facilities of this type.'

(<http://emfsafetynetwork.org/wp-content/uploads/2011/12/CelltowerRptdoc.pdf>)

47 2010. Published by Canada's National Research Council (NRC) Press: "Many Canadians are being exposed to dangerous levels of radiation and concluded that a new biologically based guideline is needed, instead of the dangerous, outdated thermal guidelines. Authors: B. Blake Levitt and Henry Lai

(http://safeschool.ca/Health_Warnings.html)

48 2010. U.S. President Barack Obama's own Cancer Advisory Panel pointed to cell phones and other wireless technologies as potential causes of cancer, and recommended: "When credible evidence exists that there may be a hazard, use [a] precautionary approach."

(<http://willthomasonline.net/how%20to%20defend%20against%20smart%20meters.htm>)

49 2010. The Canadian National Research Council states: 'Many Canadians are being exposed to dangerous levels of radiation' and concluded that a new biologically based guideline is needed, instead of the dangerous, outdated thermal guidelines.'

50 2011. The Council of Europe and the European Parliament recognize for the first time biological effects of EMF on living plants, animals and human beings. The need now is to protect citizens from EMR, particularly pregnant women, newborn babies & children.

51 2011. The Council of Europe committee calls for ban of cell phones and Wi-Fi in all schools: 'immediate action is required to protect children ... it's crucial to avoid repeating mistakes concerning the dangers of asbestos, tobacco and lead.'

52 2011. Council of Europe (47 countries, 800-million people) Notes "Conflict of Interest" 33% of studies funded by industry find cell phones harmful to humans. Over 80% of studies NOT funded by industry find cell phones harmful to humans. This is a "manifestly unacceptable situation pointing to CONFLICTS OF INTEREST which undermine the integrity, the genuine independence and the objectivity of scientific research."

(<http://www.assembly.coe.int/Documents/WorkingDocs/Doc11/EDOC12608.pdf>)

53 2011. The Council of Europe and the European Parliament (47 countries, 800-million people) recognize for the first time biological effects of EMF on living plants, animals and human beings. The need now is to protect citizens from EMR,



particularly "pregnant women, newborn babies & children."

<http://www.safeinschool.org/2011/05/europes-may-2011-report-calls-for-ban.html>

(<http://www.magdahavas.com/wordpress/wp-content/uploads/2011/06/Weigel-2011.pdf>)

54 May 27, 2011. Council of Europe Urges Break from ICNIRP and WHO. News release, urged all 47 Governments to reconsider ICNIRP's Exposure Limits (which are followed by the WHO & Health Canada) "which have serious limitations and apply "as low as reasonably achievable" principles ... Governments should 'take all reasonable measures' to reduce exposure to EMFs.

(http://assembly.coe.int/ASP/_NewsManager/EMB_NewsManagerView.asp?ID=6685)

55 May 31, 2011. WHO Classified EMR a Class 2B Carcinogen "Possible" Cause of Cancer (http://www.iarc.fr/en/media-centre/pr/2011/pdfs/pr208_E.pdf)

56 2011. Council of Europe (47 countries – 800 million people) Committee called for ban of cell phones and Wi-Fi in all schools ... immediate action is required to protect children ... it's crucial to avoid repeating mistakes concerning the dangers of asbestos, tobacco and lead.

(<http://articles.mercola.com/sites/articles/archive/2011/06/02/european-leaders-call-for-ban-of-cell-phones-and-wifi-in-schools.aspx>)

57 2011. Resolution of the Russian National Committee on Non-Ionizing Radiation

62,

Protection (RNCNIRP). Electromagnetic Fields from Mobile Phones: Health Effects on Children and Teenagers. "statistical data published in 2009 and 2010 by ROSSTAT and UNICEF show that, since 2000 there has been a steady growth in the incidence of childhood diseases identified by RNCNIRP as "possible diseases" from mobile phone use. Of particular concern is the morbidity increase among young people aged 15 to 19 years (it is very likely that most of them are mobile phone users for a long period of time). (<http://www.magdahavas.com/international-experts%E2%80%99-perspective-on-the-health-effects-of-electromagnetic-fields-emf-and-electromagnetic-radiation-emr/>)

58 2012. "Concrete evidence" EMR causes cancer" Dr Annie Sasco, PhD. who worked 22 years in W.H.O.'s International Agency for Research in Cancer (IARC), including nine as Group Leader, then was Unit Chief of Epidemiology for Cancer Prevention said: "Despite the voices of industry-funded scientists saying otherwise there is concrete evidence that mobiles/cellphones and wi-fi cause cancer in humans." (http://www.youtube.com/watch?v=2JyAIO_UdSk)

59 2012. Ontario's English Catholic Teacher's Assn. (45,000 teachers) wants to ban new Wi-Fi installations in the province's 1,400-plus Catholic schools and wants computers in all new schools to be hard-wired. (<http://www.cbc.ca/news/canada/toronto/story/2012/02/13/toronto-oecta-wifi.html>)

60 2012. Russia Warns: Pregnant women: avoid using mobile phones entirely ... also children under 18. Austria, China, Germany, India, U.K., Israel, Finland, Belgium,

64

Ireland, Spain, Sweden & Toronto have issued health warnings for children: “use cell phones in emergencies - but only on speaker phone” Prof. Yury Grigoriev, Chairman of Russian National Committee on Non-ionizing Radiation Protection (NIEP)

61 2012. Wi-Fi in Schools. “UNICEF’s,” a children’s charity, own research found an 85% increase in central nervous system disorders, a 36 % increase in epilepsy, 11 % in psychiatric problems, 82 % in blood / immune disorders in children and risk to the fetus,”

(<http://www.cso.ie/en/newsandevents/pressreleases/2012pressreleases/statisticalyearbookofireland2012/>)

62 Oct. 2012. The AAEM (American Academy of Environmental Medicine) issued a public warning: Evidence clearly exists that EMR is harmful; don’t use Wi-Fi in schools! (<http://aaemonline.org/images/LettertoLAUSD.pdf>)

63 2012. Italy’s Supreme Court sides with a businessman who developed a tumor after using a cell phone for 12 years. This is the first time that a High Court—in any country - has ruled in favor of a link between mobile phone radiation and tumor development! (www.theatlantic.com/health/archive/2012/10/italian-supr...)

64 2002 / 2012. In the Freiburger Appeal, initially 50 doctors in Germany reported reduced therapeutic efficiency of prescribed drugs correlated with the use of pulsed microwaves, such as those from Mobile Telephone Masts. Some 40,000 signatories have now supported the appeal, including 1,200 doctors. Alongside the Freiburger



Appeal there are now similar appeals from Lichtenfelser, Hofer, Bamberger and Helsinki. (http://bioenergy.timleitch.net.nz/mast_dangers/cp-masts_awful-truth.htm)

65 2012. Nobel Co-laureate Dr Devra Davis has two videos that provide critical information about how all wireless devices (cell phones, cordless phones, wifi, cell towers etc.) harm our health. (<http://www.youtube.com/watch?v=Xtd-y2C9III4&feature=endscreen&NR=1>
<http://www.youtube.com/watch?v=a6wLFcIrCtU&feature=related>)

66 BioInitiative 2012 Report. in part: Says RF EMF should be classified as a “human carcinogen”; Existing FCC, IEEE and ICNIRP [and Health Canada] guidelines ... do not protect us! Recommends Exposure Limit for chronic exposure > 3-6 million times lower/safer than Safety Code 6! (i.e. 0.3-0.6 nW/cm² vs 1000 uW/cm²). Says five new cell tower studies report bio-effects from ELF at levels 1,000 to 10,000 times lower than current exposure Limits provide for. Sufficient epidemiological evidence exists: EMF (power frequency magnetic fields) can be classified a Group 1 “Known Carcinogen”. (www.bioinitiative.org)

67 2013. A body of more than 6,000 studies has been accumulated since the 1930s producing an overwhelming conclusion that exposure to microwave and electromagnetic fields is significantly harmful to all life and health itself. (www.klinghardtacademy.com)

68 2013. Washington Times. In order to protect the general public, FCC, IEEE,



ICNIRP should immediately implement the Precautionary Principle in the matter of cell phone radiation and tighten the current safety standards. Also, a targeted and vigorous research program should be established to better evaluate the possible health risks that might be associated with the long-term avid use of cell phones.

(http://emrstop.org/index.php?option=com_content&view=article&id=173:leszczynski-i-fcc-ieee-and-icnirp-should-tighten-safety-standards-&catid=31:emf-politics-a-research-analys)

69 May 2013. Swedish review strengthens grounds for concluding that radiation from cellular and cordless phones is a probable human carcinogen.

(<http://www.ncbi.nlm.nih.gov/pubmed/23664410>)

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Below is the link to the BioInitiative Report 2012: A Rationale for Biologically-based Exposure Standards for Low-Intensity Electromagnetic Radiation.

<http://www.bioinitiative.org/report/wp-content/uploads/pdfs/BioInitiativeReport2012.pdf>

2010
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Not only do smart meters pose great health risks but they are also a fire hazard. We may never know the total number of fires caused by smart meters but we do have case report after case report of these harmful devices causing fires. Please see the below links for information on smart meters and fires.

<http://emfsafetynetwork.org/smart-meters/smart-meter-fires-and-explosions/>

<http://www.stopsmartmetersbc.ca/html/?p=4988>

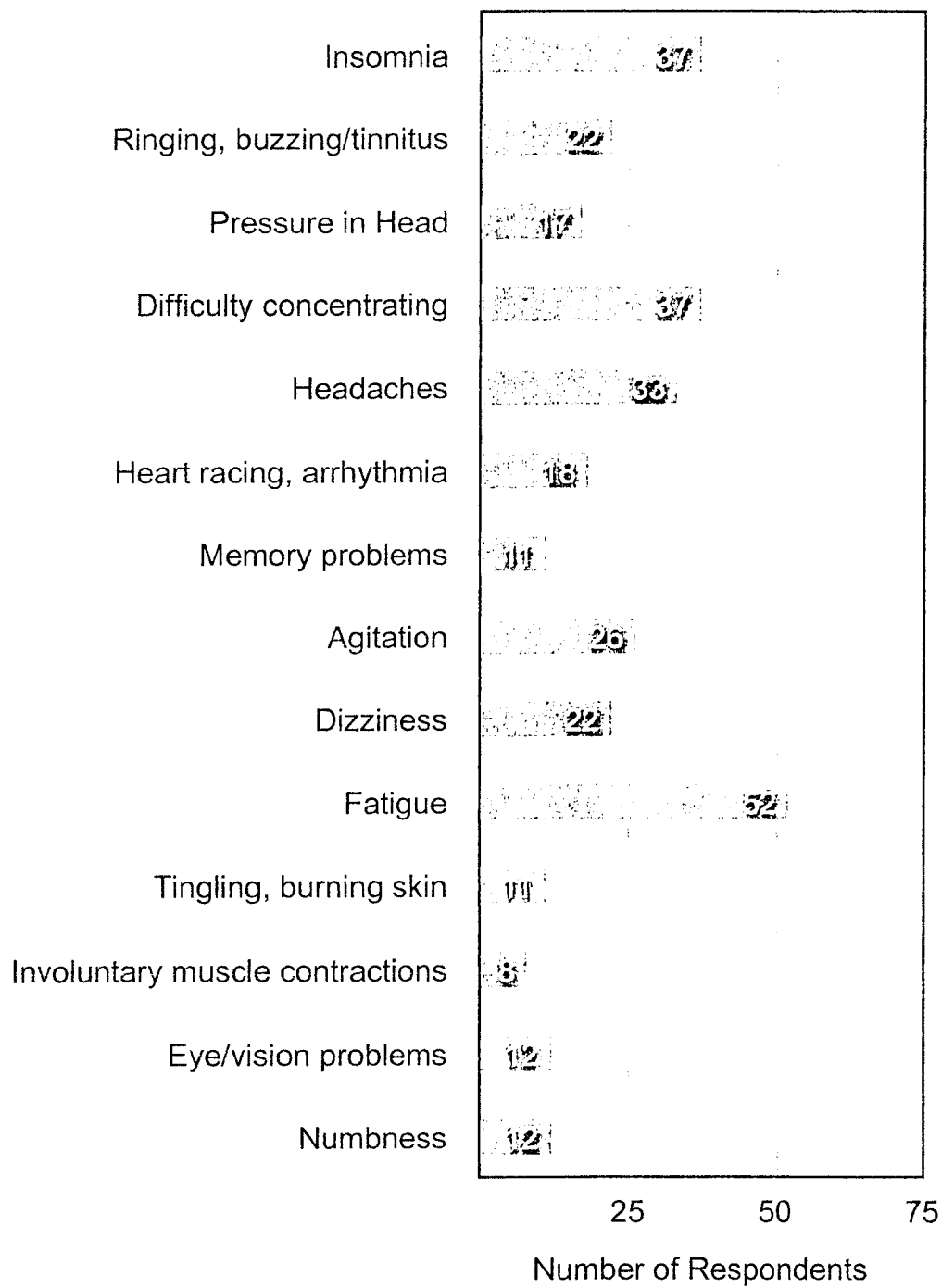
With a little research you can probably find even more information on these harmful devices and the fires they are causing.

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Severe & Worsened

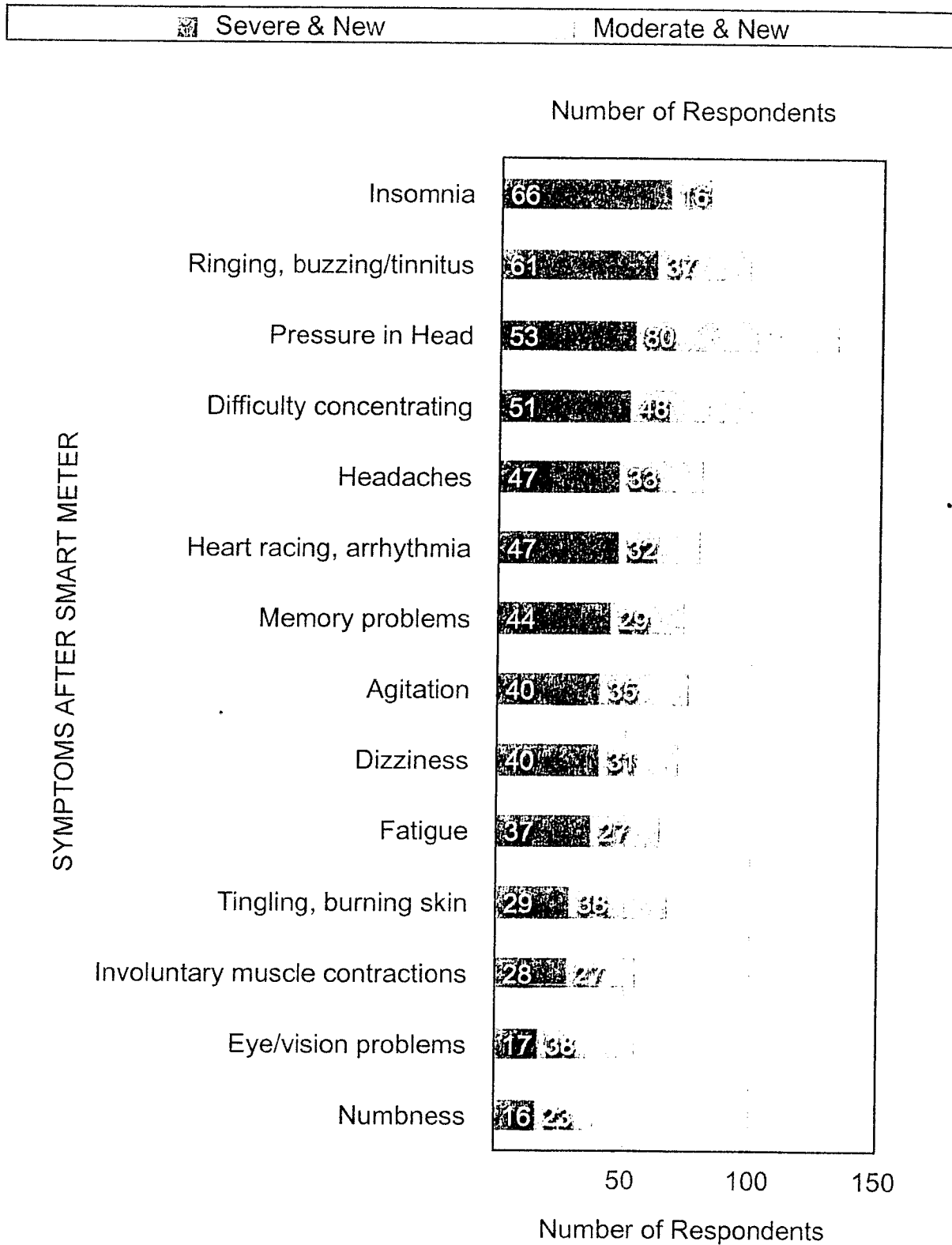
Number of respondents who checked both Severe & Worsened

SYMPTOMS AFTER SMART METER



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	A. Symptom Intensity AFTER Smart Meter Exposure			B. Symptom Category	
	MILD	MODERATE	SEVERE	New	Worsened
Agitation	15.2% 22	40.0% 50	44.8% 55	63.6% 79	37.1% 46
Difficulty concentrating /attention deficits	10.2% 13	34.4% 44	55.4% 67	54.3% 67	46.3% 58
Digestive problems	21.9% 26	48.2% 59	32.5% 40	51.4% 63	48.6% 60
Dizziness	16.3% 20	37.8% 47	45.9% 56	67.2% 83	32.8% 40
Eye/vision problems	19.5% 24	58.6% 73	21.9% 27	57.7% 71	43.9% 54
Fatigue	8.3% 10	34.4% 43	58.0% 72	46.2% 57	53.8% 66
Flu-like symptoms	27.4% 34	49.1% 61	23.6% 29	70.8% 88	29.2% 36
Headaches	12.2% 15	34.0% 42	53.8% 66	61.4% 76	38.6% 48
Heart racing, arrhythmia or palpitations	12.2% 15	39.6% 49	48.2% 59	69.9% 87	30.1% 37
High blood pressure	33.3% 40	41.7% 52	26.7% 33	68.5% 85	31.5% 39
Insomnia	10.0% 12	28.8% 36	61.2% 76	56.0% 69	44.6% 55
Involuntary muscle contractions	27.6% 34	39.0% 49	35.2% 43	73.5% 91	27.6% 34
Low blood pressure	37.8% 46	44.4% 55	17.8% 22	41.9% 52	58.1% 72
Memory problems	16.2% 20	43.4% 54	40.4% 50	64.3% 80	35.7% 44
Nosebleeds	54.1% 67	34.4% 43	11.5% 14	75.5% 93	24.5% 30
Numbness in hands or feet	29.0% 36	43.0% 53	29.0% 36	60.6% 75	41.5% 51
Pressure in head	13.4% 16	34.3% 43	53.0% 65	76.3% 95	23.7% 29
Respiratory problems	21.1% 26	50.0% 63	30.0% 37	62.0% 77	38.0% 47
Ringling, buzzing or tone in ears/tinnitus	11.0% 14	36.0% 45	53.0% 65	67.3% 84	32.7% 40
Tingling, burning or itching skin	19.1% 24	45.5% 56	36.4% 45	75.5% 93	25.5% 32
Tingling, burning or itching internally	27.7% 34	41.5% 51	30.8% 38	77.4% 96	22.6% 28

15. GROUP A: Symptom Intensity AFTER smart meters; click only one box:

APPENDIX 5

Symptom Intensity AFTER Smart Meter Exposure

	MILD	MODERATE	SEVERE	Total
Agitation	15.2% 22	40.0% 57	44.8% 65	100% 1
Difficulty concentrating/attention deficits	10.2% 15	34.4% 50	55.4% 81	100% 1
Digestive problems	21.9% 32	48.2% 70	32.5% 47	100% 1
Dizziness	16.3% 24	37.8% 55	45.9% 67	100% 1
Eye/vision problems	19.5% 29	58.6% 86	21.9% 32	100% 1
Fatigue	8.3% 12	34.4% 50	58.0% 86	100% 1
Flu-like symptoms	27.4% 40	49.1% 72	23.6% 35	100% 1
Headaches	12.2% 18	34.0% 50	53.8% 79	100% 1
Heart racing, arrhythmia or palpitations	12.2% 18	39.6% 58	48.2% 71	100% 1
High blood pressure	33.3% 50	41.7% 62	26.7% 39	100% 1
Insomnia	10.0% 15	28.8% 43	61.2% 90	100% 1
Involuntary muscle contractions	27.6% 41	39.0% 58	35.2% 52	100% 1
Low blood pressure	37.8% 56	44.4% 66	17.8% 26	100% 1
Memory problems	16.2% 24	43.4% 64	40.4% 60	100% 1
Nosebleeds	54.1% 81	34.4% 51	11.5% 17	100% 1
Numbness in hands or feet	29.0% 43	43.0% 64	29.0% 43	100% 1
Pressure in head	13.4% 20	34.3% 51	53.0% 79	100% 1
Respiratory problems	21.1% 32	50.0% 74	30.0% 44	100% 1
Ringling, buzzing or tone in ears/tinnitus	11.0% 16	36.0% 54	53.0% 79	100% 1
Tingling, burning or itching skin	19.1% 28	45.5% 68	36.4% 54	100% 1
Tingling, burning or itching internally	27.7% 41	41.5% 62	30.8% 46	100% 1

15. GROUP B: Symptom Category; click only one box:

Symptom Category

	New	Worsened	Total
Agitation	63.6%	37.1%	100%
Difficulty concentrating/attention deficits	54.3%	46.3%	100%
Digestive problems	51.4%	48.6%	100%
Dizziness	67.2%	32.8%	100%
Eye/vision problems	57.7%	43.9%	100%
Fatigue	46.2%	53.8%	100%
Flu-like symptoms	70.8%	29.2%	100%
Headaches	61.4%	38.6%	100%
Heart racing, arrhythmia or palpitations	69.9%	30.1%	100%
High blood pressure	68.5%	31.5%	100%
Insomnia	56.0%	44.6%	100%
Involuntary muscle contractions	73.5%	27.6%	100%
Low blood pressure	41.9%	58.1%	100%
Memory problems	64.3%	35.7%	100%
Nosebleeds	75.5%	24.5%	100%
Numbness in hands or feet	60.6%	41.5%	100%
Pressure in head	76.3%	23.7%	100%
Respiratory problems	62.0%	38.0%	100%
Ringling, buzzing or tone in ears/tinnitus	67.3%	32.7%	100%
Tingling, burning or itching skin	75.5%	25.5%	100%
Tingling, burning or itching internally	77.4%	22.6%	100%

Survey 32114

CommentsQ46, Jan30

Survey: Smart Meter Health Effects Survey (Live Dec. 4, 2012)

46. You can enter additional health-related comments in the space provided below, including if you wish, a short summary of the impacts smart meters have had on your life. (Your entry is limited to 300 words).

ResponseID Response

- 1 SMs installed 1/24/12. Felt fine until went to bed on 1/24/12, sick all night and woke up 1/25/12 really sick. Discovered SM on neighbor's house outside my bedroom window 25 feet from head of my bed. Called FPL and confirmed meter had been installed on prior afternoon. Haven't had a single good day or decent night's sleep since installation. It was a dramatic change in my health, which has continued to deteriorate. I've had a dramatic change in my behavior/personality, too. I cry at the drop of a hat. I get irritable and argumentative. Restless to the point of pacing. I've developed a cough over the last month not associated with any cold, influenza, etc. I attribute it to worsening health from RF radiation. I have lost roughly 18 years of progress in my treatment of my CFIDS and MCS. My CFIDS had been quite mild, but now is almost as bad as when I first got sick 23 years ago. My MCS has gotten somewhat worse, too.
- 3 Smart meters have restricted my access to friends, family, public services, and certain neighborhoods. Ban them.
- 6 my life is over.havent slept in 3 yrs now.my cats are being tortured by the devices as well,and there is no where to go.i have parkinsons like symptoms frequently,all good memories of my life are gone.no one left to call,no where to go,no way to get there.doctor is more harm than good,politicians dont care.billions of bats and frogs thrived here before "deployment.they and all life in the creek are gone forever now.trees are dying a slow death for miles,and if it werent for leaving a kid and 6 feline family members behind ...well...i really see no reason to live.there is no more joy in my life.it is a constant stressfull struggle each and every day with no light at the end of the tunnel.mercury/cadmium/nickel dentistry started my disabilities,and smartmeters zapped what life i had left.hope the dentists and utilities profiting enjoy their beachfront houses.their professions have cost me all hope for a normal life.if there were justice in this world,these people and their poisonous products would be behind bars.my friend has gone from 235lbs to 400+lbs. since this program started,and he will need oxygen tanks soon.his dad died relatively soon after deployment.the cells of every living creature in this state is under constant and consistent stress.god help us all
- 8 Type A personality, loved to work. Had had chemical sensitivity for years. Big mold toxin exposure made me super MCS and gradually EMF sensitive. Smart meters made me even more EMF sensitive, and now homeless and unable to work for the last 4 years. Biggest loss is the joy of being able to work, and to be productive, not just the financial loss which has been huge. Life for the next 15

years has been totally about survival. Had to get out of escrow 7 times, 1/2 from mold and 1/2 from nearby wi-fi. Electrical sensitivity is real and extremely limiting - few safe places to go free of EMF. Family (except for wife, who is also electrically sensitive) don't believe me - that's the worst - because it is an intangible, invisible disability that they have never experienced themselves.

- 9 I am electrosensitive and have taken measures to limit exposure to EMF/RF. I do not have WiFi in my home. I refused installation of a smart meter by SMUD and have been active in trying to bring awareness to this issue. Recently via a public records request, I found out that SMUD installed a digital meter on my home in 2007 without my permission. According to SMUD, this meter sends out an RF pulse every 30 seconds. This correlates with onset and aggravation of many health related symptoms to myself and my family. My son's bedroom and bed is not far from this meter. He was entering the 4th grade when this meter was installed. In 3rd grade, he was recommended for a special program for advanced and gifted children. In 4th grade, he refused to write or draw saying, "I can't". Later, behavioral problems developed. In 2010, he was evaluated and deemed to have ADD. He continues to struggle and has also complains of ringing in his ears. He is also fatigued and irritable. I also thought it was odd that he never dreams. I believe the digital meter is responsible for this. According to my research, RF/EMF affects the brain and disrupts proteins needed for brain function. This is backed by more than 2300 research studies, many done by the Naval Medical Research Institute and Yale showing repeatable harmful results. How can this be ignored and disregarded because the FCC says 'no thermal radiation', so it's safe. This is outrageous!!! I want these dirty polluting health wrecking devices off of my home and a return to safe analog meters nationwide. No one deserves to suffer like this. Even those that do not notice the effects are still getting a cumulative exposure that will eventually cause damage.

- 12 Before smart meters, I had worked in an office full of computers and wi-fi and had no electrical sensitivities. I had not even heard of electrical sensitivities, and had no concerns about smart meters. Both my wife and myself began to develop mysterious symptoms that we never had before, and then more than a week after the symptoms began, we discovered that smart meters had been installed before we first developed the symptoms. Because of smart meter exposure I am now extremely electrically sensitive and can no longer safely live in our San Francisco home. I went from being a perfectly healthy 35 year old to being electrically sensitive in a matter of weeks. The limitations of this condition are extraordinary. I do not know how much longer I will be able to work at my financial services firm. Nor do I know how much longer I will be able to live in a city or town with a cell phone tower. Once a person becomes sensitized to microwave radiation, life becomes completely different, and difficult. I have constant headaches, unless I am in nature. My ears ring if I am within miles of a cell tower. I have fatigue if I am around wi-fi for too long. Using a cell phone for calls or internet functions has become impossible. I used all of the above technology just 15 short months ago with no problems. I had no idea such technology could be harmful. Now my wife and I search for a safe place to live and I look back fondly on the days I could use a computer without symptoms. I know that many, many others are going through similar situations - all since

installation of smart meters. Something must be done.

- 15** In January 2012, during our absence while boondocking near Bouse, Arizona, thirteen smartmeters were installed within 2.5 metres from our townhouse's outside wall, in BC Hydro's Electrical Room. My wife and I have felt the negative effects ever since our return on the 29th of February, each with different symptoms. She is 71 and I am 70. Note that we do not have a smartmeter for our own townhouse unit, as this is still an analog meter, located in between the smartmeters. We call it the "Lone Ranger" and have asked BC Hydro several times to remove the thirteen smartmeters, without any response. Our initial request not to have a smartmeter was granted by BC Hydro. We are afraid that they will come one of these days and replace it anyway. Our townhouse is listed "For Sale" with a realtor. The natural gas company (FortisBC) now wants to install four AMS devices on the outside wall of our townhouse. This will aggravate the situation and decrease the "relatively safe living space" in our townhouse. We have not even been in our living room for the past half a year! One additional thing: After our return from Arizona, we started to use another car that we had bought in December 2011. This is a 2003 GMC Tracker - with more internal electronics than our former car, a 1997 Nissan Altima. While driving, my lower legs hurt in this vehicle, and never did before. Our other vehicle is a 1993 GMC Sierra 1-ton diesel truck, used to pull our 5th wheel trailer with solar panels and a small inverter. In a few weeks, we hope to test our health again by escaping our townhouse. This past summer, we went to Alberta for three weeks and our health condition improved in the trailer.
- 17** The side effects got worse neurologically for me it took months for me to recover after the smart meters were removed from my neighbors homes. I did not have a meter on my home. I called FPL and begged them to remove the meters that I was very ill they declined and I had a seizure and was rushed by EMS to the ER.
- 20** Since the smart meter GRID was placed in my community, I cannot sleep. I opted out but two of my immediate neighbors didn't. Worse, the electric poles with big new transformers are right outside my house and I experiencing an electric pulse under me all night long. I can't sleep. My CPUC complaint was ignored (I got a boiler plate response back), and I have done tons of remediation in my house to isolate the problem, and am sure it is due to the smart meters and smart meter grid. I am selling my house and moving to off grid Dominica. My survival is at stake.
- 22** Ability to work or find a place to work, visit friends, go to the post office, go grocery shopping, etc be active in my community or play has become impossible. I need to move again and it is getting increasingly more difficult to find a community where I can live. This is depressing enough but I worry about the depression that can set in when I'm inadvertently exposed as more and more territory around me is being installed. Now i have become so sensitized that driving through areas is incredibly uncomfortable. It sucks when you have to decide where to live based on the electric company you will be paying for service. I moved to FL for the sun and sand not expecting to get burnt and now I can't live on any stretch of coast line due to the metering. I sure as heck didn't

